COUNTY OF BRUCE

MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT FOR THE DURHAM STREET BRIDGE (WALKERTON)

ENVIRONMENTAL STUDY REPORT

BMROSS
engineering better communities

COUNTY OF BRUCE

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ENVIRONMENTAL STUDY REPORT

August 14, 2024

B. M. ROSS AND ASSOCIATES LIMITED
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File No. BR1395

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LIST OF ACROYNMS

AA	Archaeological Assessment
ANSI	Area of Natural and Scientific Interest
ATRIS	Aboriginal and Treaty Rights Information System
BCS	Bridge Condition Survey
BMROSS	B. M. Ross and Associates Limited
CBO	Chief Building Official
CHER	Cultural Heritage Evaluation Report
COTTFN	Chippewas of the Thames First Nation
CWA	Clean Water Act
DFO	Department of Fisheries and Oceans
EA Act	Environmental Assessment Act of Ontario
ECA	Environmental Compliance Approvals
ESA	Endangered Species Act
ESR	Environmental Study Report
HIA	Heritage Impact Assessment
MCEA	Municipal Class Environmental Assessment
MCM	Ministry of Citizenship and Multiculturalism
MDF	Maximum Day Flow
MECP	Ministry of Environment, Conservation and Parks
MHSTCI	Ministry of Heritage, Sport, Tourism and Culture Industries
MNRF	Ministry of Natural Resources and Forestry
NHIC	Natural Heritage Information Centre
OP	Official Plan
PIC	Public Information Centre
PPS	Provincial Policy Statement
SARA	Species at Risk Act
SGRA	Significant Groundwater Recharge Area
SON	Saugeen Ojibway Nation
SVCA	Saugeen Valley Conservation Authority
WHPA	Well Head Protection Area

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1.0 INTRODUCTION AND BACKGROUND

1.1 Introduction

The County of Bruce has initiated a Class Environmental Assessment (Class EA) process to consider options associated with the Durham Street Bridge which spans the Saugeen River along Bruce Road 4 in the community of Walkerton, Ontario. The framework of the study built upon the recommendations of recent engineering inspections, which identified significant problems with deterioration of key bridge components. The Class EA investigation involved an evaluation of options to resolve problems identified with the Durham Street Bridge and addressing potential public safety concerns associated with the crossing.

The study process followed the procedures set out in the Municipal Class Environmental Assessment (Class EA) document, dated October 2000, as amended in 2007, 2011, 2015 & 2023. B. M. Ross and Associates Limited (BMROSS) were engaged to conduct the Class EA investigation on behalf of the County. The purpose of this report is to document the Schedule 'C' Class EA process followed for this project. The report includes the following major components:

- An overview of the general project area.
- A summary of deficiencies associated with the existing structure.
- A review of specialized investigations completed in support of the Class EA.
- A description of the alternative solutions considered for resolving the defined problems.
- A synopsis of the decision-making process conducted to select a preferred alternative.
- A detailed description of the preferred alternative.

1.2 Municipal Class Environmental Assessment Process

Municipalities must adhere to the *Environmental Assessment Act of Ontario* (EA Act) when completing road, sewer, or waterworks activities. The Act allows the use of Class Environmental Assessments for most municipal projects. A Class EA is an approved planning document which describes the process that proponents must follow to meet the requirements of the EA Act. The Class EA approach allows for the evaluation of alternatives to a project, alternative methods of carrying out a project, and identifies potential environmental impacts. The process also involves mandatory requirements for consultation and engagement with the public, various agencies, and Indigenous communities. Class EA studies are a method of dealing with projects which have the following important characteristics in common:

- They are recurring
- They are usually similar in nature
- They are usually limited in scale
- They have a predictable range of environmental effects
- They are responsive to mitigating measures

If the Class EA planning process is followed, a proponent does not have to apply for formal approval under the EA Act. The development of this investigation has followed procedures set out in the Class EA document. Figure 1.1 presents a graphical outline of the procedures that were followed.

The Class EA planning process is divided into the following phases:

Phase 1 Problem identification.

Phase 2 Evaluation of alternative solutions to the defined problems and selection of a preferred solution.

Phase 3 Identification and evaluation of alternative design concepts in the selection of a preferred design concept.

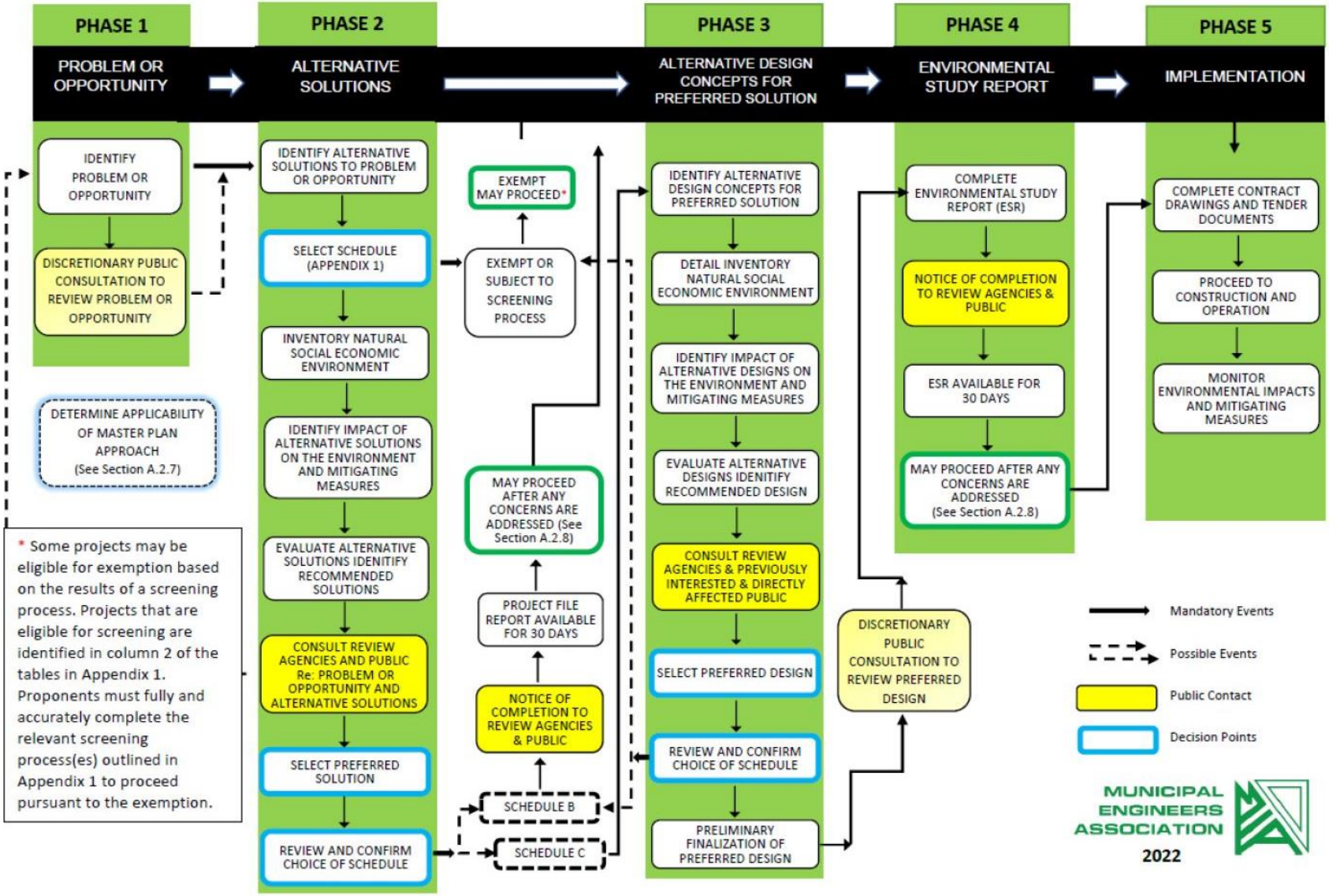
Phase 4 Preparation and submission of an Environmental Study Report for public and government agency review.

Phase 5 Implementation of the preferred alternative and monitoring of any impacts.

Throughout the Class EA process, proponents are responsible for the following key principles of environmental planning:

- Consultation with affected parties throughout the process
- Examination of a reasonable range of alternatives
- Consideration of effects on all aspects of the environment
- Application of a systematic methodology for evaluating alternatives
- Clear documentation of the process to permit traceability of decision-making

Figure 1.1 Class EA Process



1.3 Project Management

The County of Bruce is considered the project proponent under the terms of the Class EA document. The County engaged BMROSS to carry out the Class EA study process on their behalf.

1.4 Classification of Project Schedules

Projects are classified to different schedules according to the potential complexity and the degree of environmental impacts that could be associated with the project. There are four schedules:

Schedule A - Projects that are pre-approved with no need to follow the Class EA process.

Schedule A+ - Projects that are pre-approved but require some form of public notification.

Schedule B - Projects that are approved following the completion of a screening process that incorporates, as a minimum, Phases 1 and 2 of the Class EA process.

Schedule C - Projects that are approved following the completion of the full Class EA process.

The Class EA process is self-regulating, and project proponents are expected to identify the appropriate level of environmental assessment based upon the project they are considering.

1.5 Environmental Study Report

An Environmental Study Report (ESR) is produced at the end of the Class EA to provide documentation of the decision-making process followed by the proponent of a project. Included in the report is a description of the problem or opportunity; pertinent background information; the rationale for the selection of the preferred solution; descriptions of the environmental considerations and impacts; any mitigating measures that will be undertaken to minimize environmental effects, a description of the consultation process; and a description of any monitoring programs to be carried out during the construction phase. Upon completion, the report is made available to the public and review agencies for a period of 30 calendar days.

1.6 Mechanism to Request a Higher Level of Environmental Assessment

Under the terms of the Class EA, the requirement to prepare an individual environmental assessment for approval is waived. However, if it is perceived that a project going through the Class EA process has significant environmental impacts, a person/party may convey their concerns to the County of Bruce for further consideration. A request may be made to the Ministry of the Environment, Conservation and Parks (MECP) for an order requiring a higher level of study (i.e. requiring an individual/comprehensive EA approval before being able to proceed), or that conditions be imposed (e.g. require further studies), only on the grounds that the requested order may prevent, mitigate or remedy adverse impacts on constitutionally protected Indigenous and treaty rights. Requests made on any other grounds will not be considered by the MECP.

2.0 ENVIRONMENTAL SETTING

2.1 Background Review

A background review was carried out to obtain a general characterization of the project area and to identify factors that could influence the selection of alternative solutions to the defined problem. The background review for the Class EA process incorporated the following:

- Assembly of information on the existing structure and the environmental setting.
- Review of deficiencies at the bridge site.
- Preliminary assessment of the identified deficiencies and potential remediation.

A desktop analysis of the project setting was completed as part of the background review. The following represent the key sources of information for this analysis:

- BMROSS. Ontario Structure Inspection Manual (OSIM) reports and files.
- Saugeen Valley Conservation Authority. Website and Mapping Services.
- Government of Canada. Species at Risk Public Registry website.
- Ministry of Natural Resources & Forestry. Natural Heritage Information Centre (NHIC) website.
- Municipality of Brockton. Files and discussions with staff.
- County of Bruce. Files, website, and information provided by staff.

Several background reports were also commissioned at the start of the Class EA process to gain a better understanding of the project study area and to aid in the selection of a preferred alternative. Specialists in cultural heritage and geotechnical analysis, were retained to provide individual reports on those specific aspects of the environment. In addition, several studies were completed in-house by BMROSS technical staff, which have some bearing on the current analysis. A summary of these reports is included later in the document.

2.2 Description of Study Area

2.2.1 County of Bruce

The County of Bruce forms the northwest portion of Southern Ontario and is bounded on the west by Lake Huron and on the northeast by Georgian Bay. The bridge site is located in the eastern part of Bruce County, within the Community of Walkerton, which is situated within the Municipality of Brockton. Brockton forms the southeast quadrant of the County of Bruce and is one of the largest settlement areas in the County. The project study area, as illustrated in Figure 2.1, encompasses the Community of Walkerton, as well as lands located adjacent to the bridge site and within adjacent Municipalities that may form part of a proposed detour route.

2.2.2 Municipality of Brockton - Walkerton

The Municipality of Brockton was formed in 1999, following the amalgamation of the former municipalities of Brant, Greenock and Walkerton. Brockton is located in the southeastern corner of Bruce County, north of the Municipality of South Bruce and east of the Municipality of Kincardine. It is bordered by the Town of Hanover and Municipality of West Grey to the west. Provincial Highway 9 runs in an east-west direction across the southern portion of the Municipality, connecting Walkerton with Kincardine and Mildmay. Walkerton is the largest urban community within the Municipality, with a population of 4,724 as of the 2021 Census. It serves as a “county seat” for the County of Bruce, as well as an administrative, commercial, and industrial centre for Brockton. The town is located at the junctions of Highway 9 and Bruce County Road 4. It is intersected by the Saugeen River.

Walkerton is predominately a residential centre, with a well-established downtown commercial core, a developed industrial sector and an expanding highway commercial component. The town provides a variety of facilities for local residents and the surrounding region, including an arena, community centre, elementary and secondary schools, and health care services, including a hospital. The community is serviced by a municipal sewage and water system. The location of Walkerton and the Municipality of Brockton are shown in Figure 2.2.

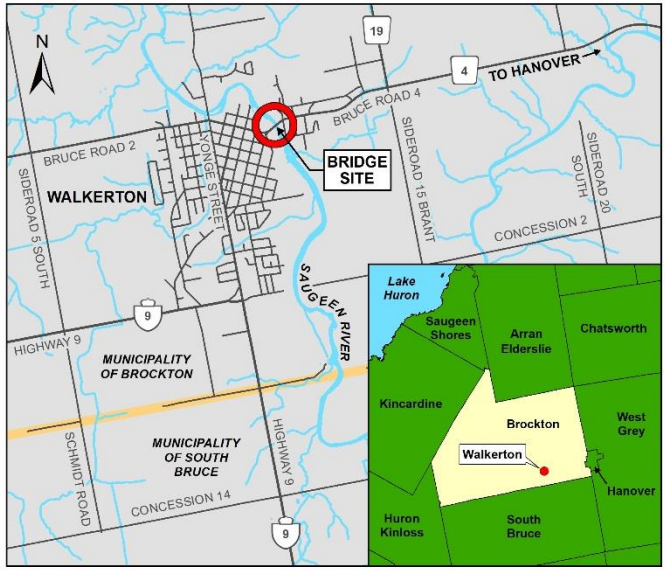
2.2.3 Project Study Area Description

The Durham Street Bridge is located along Bruce County Road 4 where it spans the Saugeen River in the northeast corner of Walkerton. Bruce Road 4 is owned and maintained by the County of Bruce and is classified as an arterial county road in the Walkerton Community Official Plan. The roadway forms part of the Bruce County Road network, serving as a major east/west transportation corridor in the County. Bruce Road 4 experiences high traffic volumes as it connects the northeast end of Walkerton to the rest of the community and moves large volumes of traffic through the community. At the bridge site the road is comprised of two lanes with sidewalks on either side of the bridge structure.

Figure 2.1 – Project Study Area

BMROSS engineering better communities	**COUNTY OF BRUCE** MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT FOR THE DURHAM STREET BRIDGE COMMUNITY OF WALKERTON, MUNICIPALITY OF BROCKTON **STUDY AREA**	DATE JUNE 06, 2024	PROJECT No. BR1395
		SCALE AS SHOWN	FIGURE No. 2.1

Figure 2.2 – General Location Plan



KEY PLAN
NOT TO SCALE

DURHAM STREET LOOKING WEST

NORTH ELEVATION

DECK SOFFIT

EXPOSED SOFFIT REINFORCEMENT

SITE PHOTOS TAKEN IN OCTOBER 2018

AERIAL PHOTOGRAPHY OF PROJECT AREA
SCALE 1 : 3,500

BMROSS engineering better communities

COUNTY OF BRUCE
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT FOR THE DURHAM STREET BRIDGE
COMMUNITY OF WALKERTON, MUNICIPALITY OF BROCKTON
GENERAL LOCATION PLAN

DATE	PROJECT No.
JUNE 06, 2024	BR1395
SCALE	FIGURE No.
AS SHOWN	2.2

The existing three span beam bridge spans the Saugeen River and is located 9 kms west of Hanover. The bridge has a total deck length of 67 meters, overall structure width of 12.6 meters, total area of 844.2m^2, and a roadway width of 9.1 meters.

Land uses in the vicinity of the bridge site consist of both residential and commercial activities. Northeast of the bridge are two large condominium developments located on the north bank of the Saugeen River. Residents of the development routinely walk across the bridge to access the downtown Walkerton shopping district. Single family residential homes are located east of the bridge off of William, Elm and George Streets. A pizza restaurant located within a former gas station, is situated northwest of the bridge and a Tim Hortons restaurant is located southwest of the crossing. A segment of the Walkerton Community Trail extends along the south bank of the Saugeen River, east of the bridge with a parking area for trail users located between the Tim Hortons parking lot and the riverbank. A wooded area is located northwest of the bridge, between the pizza restaurant and the top of bank. Photos of the bridge and surrounding land uses are shown in Figure 2.3.

Figure 2.3 Bridge Photos

West Elevation of Durham Street Bridge (October 24, 2018) ▲

South Elevation of Durham Street Bridge (March 10, 2021) ▲

View looking downstream from the bridge ▼

2.3 Natural Environment

2.3.1 Physiography and Soils

Table 2.1 summarizes the general physiographic features and soils evident in the vicinity of the bridge.

Table 2.1
Physiographic Features and Soil Types

Feature	General Characteristics
Physiography	• The bridge site is located within the Saugeen Clay Plain physiographic region, which is situated in the Saugeen River drainage basin, north of the Walkerton Moraine. • The Saugeen Clay Plain is a small clay plain underlain by deep stratified clay deposited in a bay of historic Lake Warren.
Soils (General)	• The river valley area is classified as Bottomland. This is comprised of alluvial soils exhibiting variable drainage characteristics. • Soils in the study area primarily consist of Saugeen silty clay loam.

2.3.2 Hydrology

The Lower Main Saugeen River extends in a southeast to northwest orientation through the community, skirting the east and then north edges of the urban area. The river forms a significant landmark within the community and is utilized by local fisherman and canoeists, while also providing a stunning backdrop for the local community trail and several community parklands. The Saugeen River is located within the watershed limits of the Saugeen Valley Conservation Authority (SVCA) and is one of the largest river systems in southwestern Ontario, draining 4,052 km^2 of predominantly rural Ontario from the community of Dundalk west towards its outlet at Lake Huron. The presence of numerous cold-water streams in the upper reaches of the watershed provide excellent habitat for a variety of salmonoid species such as Brook Trout, Rainbow Trout, Brown Trout and Chinook Salmon. Bass and pike are also found within the Saugeen River watershed making it an important recreational fishery in the area.

The presence of a large river system in Walkerton has both advantages and disadvantages. Although providing a multitude of recreational opportunities, the river has led to historic flooding within the community with much of the downtown area located within the floodplain limits. A flood control dyke is situated along the banks of the river at several locations up and downstream of the bridge, and therefore the design of the structure will need to give careful consideration to hydraulics within the river and ensure that any proposed changes to the structure would consider impacts to the flood control dykes. Watershed Report Cards for the Lower Saugeen River are located within Appendix A along with excerpts from recent floodplain mapping studies.

2.3.3 Sensitive Natural Features in the Vicinity of the Study Area

A review of sensitive natural heritage features located in the vicinity of the project area was carried out as part of the background review. The Ministry of Natural Resources and Forestry's (MNRF)' Natural Heritage Information Centre (NHIC) database was consulted to verify the current status of significant natural areas in the vicinity of the bridge site. Sensitive natural features located within 5 km of the bridge site are illustrated on Figure 2.4. A description of significant features is included below.

(a) Areas of Natural and Scientific Interest (ANSI)

ANSI's take two forms; Earth Science, which are representative of significant geophysical landforms, and Life Science, which are representative of significant terrestrial features within the landscape, such as wetlands and woodlands. There are no ANSIs within or immediately adjacent to the study area. The nearest ANSI is the Saugeen River Section Earth Science ANSI, located approximately 7 km northwest of Walkerton. Given this distance, the proposed bridge project is not expected to have any impacts on existing ANSI features.

(b) Provincially Significant Wetlands

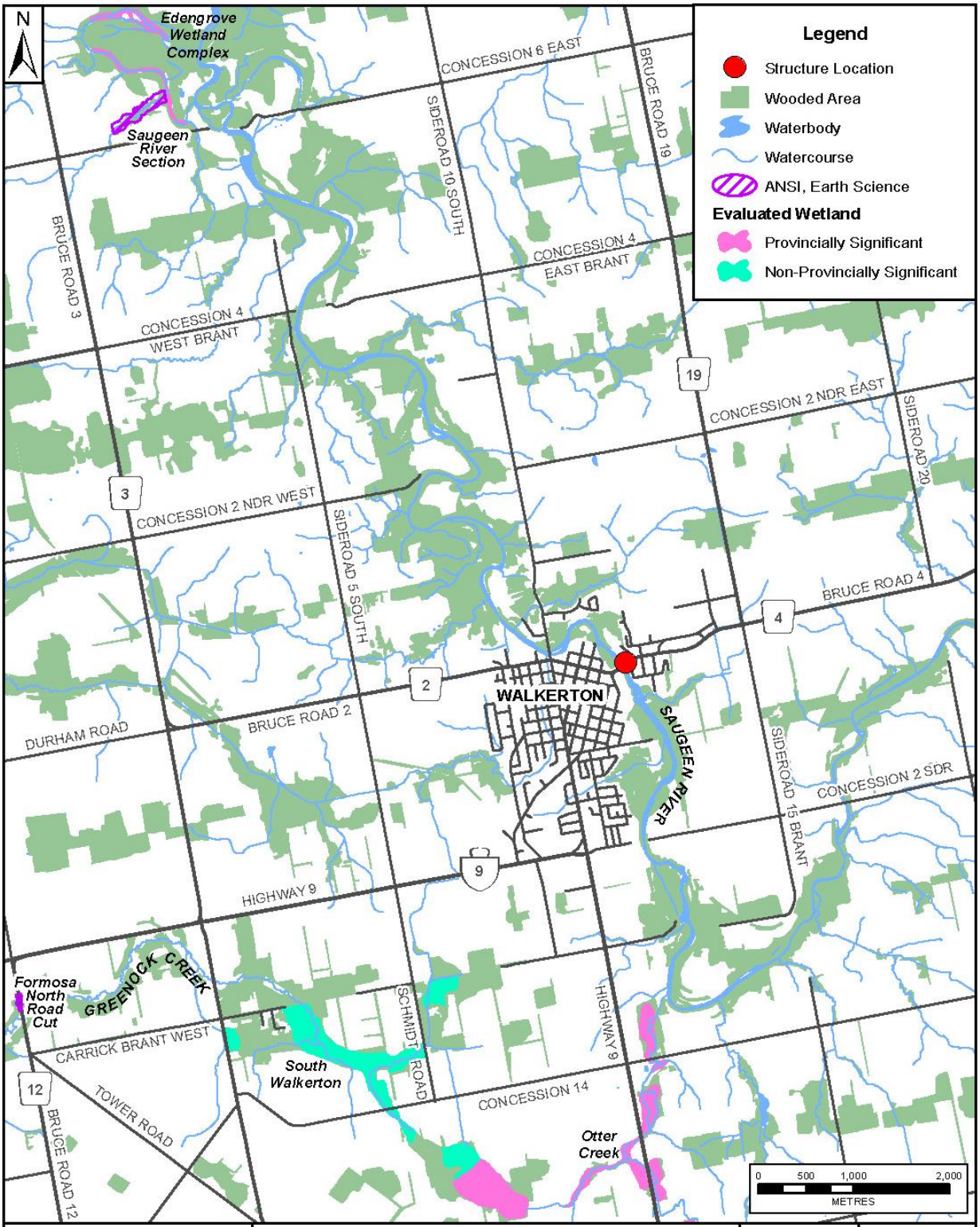
The Otter Creek Wetland and South Walkerton Wetland are located southwest of the study area. Otter Creek Wetland has been identified as a Provincially Significant Wetland while the South Walkerton Wetland is regionally significant. These wetland areas are located approximately 5 km southwest of the study area and given that distance, no impacts to these features are anticipated as a result of the project.

A number of small locally significant wetlands are also located adjacent to the river corridor up and downstream of the bridge site. Impacts to the surrounding aquatic environment will be minimized through proper mitigation measures implemented during construction.

2.3.4 Aquatic Habitat (Saugeen River)

The Saugeen River system drains an area of over 4,000 km^2 in Midwestern Ontario, with the main branch headwater located near Dundalk (Chapman & Putnam, 1984). The river maintains a strong summer flow, due in part to contributions from tributaries including the: North Saugeen, Rocky Saugeen, Beatty and Teeswater rivers. The topography of the headwater area is generally rough and rocky; however, the majority of the watershed has been cleared for agricultural purposes. Upstream of Walkerton, the Saugeen River flows within a glacial spillway associated with the Horseshoe Moraine. In Walkerton, the river turns north, through a river valley approximately 1 km wide and 150 m deep (Chapman & Putnam, 1984). From Walkerton downstream, the Saugeen River flows north towards Paisley and its outlet to Lake Huron at Southampton. Historically, the river served as a transportation route between Southampton and Port Elgin to Walkerton and as a source of power for numerous dams, sawmills and grist mills along the route. Currently, it is a popular recreational canoeing route.

Figure 2.4: Natural Heritage Features



The project bridge spans the Lower Main Saugeen River, managed by the SVCA. The river is characterized as having a cold water thermal regime and supports Brook Trout populations that rely on cold, highly oxygenated environments to survive. Baitfish, including Creek Chub, Bluntnose Minnow, Common Shiner, and Northern Redbelly Dace, as well as a top predator, the Northern Pike, are also present within the system. Other fish species present include Brown Trout, Chinook Salmon, Blackside Darter, Brook Stickleback, Golden Redhorse, Pumpkinseed Sunfish, Brassy Minnow, Hornyhead Chub, Yellow Perch, Stonecat, Fathead Minnow, Emerald Shiner, Rainbow Trout, Silver Lamprey, White Sucker and Smallmouth Bass.

2.3.5 Aquatic Habitat Assessment

To further assess the potential impacts of construction on the receiving watercourse, an aquatic habitat assessment of the Saugeen River was undertaken by BMROSS technical staff at the bridge site. A summary of the methodology utilized to complete the assessment, as well as the report's conclusions and recommendations, are summarized below. A copy of the Habitat Assessment is included in Appendix B.

(a) Methodology

The aquatic habitat assessment involved a background review of aquatic and terrestrial species recorded in the area and field investigation work conducted on September 1, 2021. During the field investigation work, aquatic habitat features including water depth, turbidity and substrate composition were recorded along transects within the project limits. Riparian vegetation and observed aquatic and terrestrial species were documented.

(b) Fish Community

A search of MNRF's records and reports revealed fish information for this sub-watershed area. The Saugeen River has a coldwater thermal regime and the following fish species are present: Chinook Salmon, Trout-perch, Alewife, Blackside Darter, Bluntnose Minnow, Brassy Minnow, Brook Stickleback, Brook Trout, Brown Trout, Central Mudminnow, Coho Salmon, Common Shiner, Creek Chub, Eastern Blacknose Dace, Emerald Shiner, Fantail Darter, Fathead Minnow, Gizzard Shad, Golden Redhorse, Hornyhead Chub, Johnny Darter, Longnose Dace, Mimic Shiner, Muskellunge, Northern Pike, Northern Redbelly Dace, Pearl Dace, Pumpkinseed, Rainbow Darter, Rainbow Smelt, Rainbow Trout, River Chub, Rock Bass, Rosyface Shiner, Sand Shiner, Sea Lamprey, Shorthead Redhorse, Silver Lamprey, Silver Redhorse, Smallmouth Bass, Sockeye Salmon, Splake, Spotfin Shiner, Stonecat, White Sucker and Yellow Perch.

During the field investigation work, evidence of freshwater mussels (shells and live individuals) was recorded within the project study limits. Species recorded include Spike (*Elliptio dilatata)*, Slippershell (*Alasmidonta viridis*), Elktoe (*Alasmidonta marginata)* and Black Sandshell (*Ligumia recta*). The Rusty Crayfish (*Orconectes rusticus*), an invasive crayfish species, was also observed within the study limits.

Photo of Live Elktoe

Photo of Spike shell

(c) Aquatic Habitat

Water flow varied throughout the site, with rapid flows observed within the middle of the channel and slower flows along the banks of the river. Water clarity was high and substrate was visible at the bottom of the channel. Substrate composition was relatively uniform throughout the site with smaller substrates (cobble, gravel and silt) observed along the bank and large cobble observed adjacent to the central pier. Water depths gradually increased from the bank to the central pier. Algae was observed on semi-submerged rocks on the east side of the structure. Riparian vegetation was observed along the bank and consisted of common shrubs, wildflowers and grasses.

(d) Conclusions

Aquatic habitat features were identified and recorded during the aquatic habitat assessment and specific site mitigation measures were developed to mitigate impacts from construction on these features. This includes completing in-water work within appropriate fish timing windows, completing a freshwater mussel relocation and fish salvage within in-water work areas prior to construction, implementing sediment and erosion control measures, restoring disturbed riparian vegetation and obtaining necessary permits prior to project commencement.

2.3.6 Species at Risk

An evaluation for the presence of significant species and their associated habitats within the bridge site has been incorporated into the project planning process. A review of available information on species and habitat occurrences determined that the study area may contain species and/or associated habitats that are legally protected under provincial and federal species at risk legislation. The protection for species at risk and their associated habitats is directed by the following federal and provincial legislation:

- The Federal Species at Risk Act, 2002 (SARA) provides for the recovery and legal protection of listed wildlife species and associated critical habitats that are extirpated, endangered, threatened or of special concern and secures the

necessary actions for their recovery on lands that are federally owned. Only aquatic species and bird species included in the Migratory Bird Convention Act (1994) are legally protected on lands not federally owned; and
- The provincial Endangered Species Act, 2007 (ESA) provides legal protection of endangered and threatened species and their associated habitat in Ontario. Under this legislation, measures to support their recovery are also defined.

Based on the information available for the occurrence of species at risk and their associated habitats from the following sources, a summary of federally and provincially recognized species with the potential to be present within the project study area are listed in Table 2.2:

- MNRF, Species at Risk by Area
- NHIC, Make a Natural Heritage Map;
- The project study area is located within the 1 km NHIC square identified as 17MJ8886. This square in addition to adjacent squares were consulted.
- Environment Canada, Species at Risk Public Registry. SARA Schedule 1 Species List (Government of Canada, 2017).

Table 2.2: Species at Risk Within Bruce County

Type	Species Common Name	Species Scientific Name	Federal Status	Provincial Status	Suitable Habitat in Study Area
Bird	Bald Eagle	*Haliateetus leucocephalus*	N/A	Special Concern	No
Bird	Barn Swallow	*Hirundo rustica*	N/A	Threatened	No
Bird	**Bank Swallow**	***Riparia riparia***	**N/A**	**Threatened**	**No**
Bird	Black Tern	*Chlidonias niger*	N/A	Special Concern	No
Bird	Bobolink	*Dolichonyx oryzivorus*	N/A	Threatened	No
Bird	Canada Warbler	*Wilsonia canadensis*	Threatened	Special Concern	No
Bird	Cerulean Warbler	*Setophaga cerulea*	Special Concern	Threatened	No
Bird	Chimney Swift	*Chaetura pelagica*	Threatened	Threatened	No
Bird	Common Nighthawk	*Chordeiles minor*	Threatened	Special Concern	No
Bird	Eastern Meadowlark	*Sturnella magna*	N/A	Threatened	No
Bird	Eastern Whip-poor-will	*Antrostomus vociferus*	Threatened	Threatened	No
Bird	Eastern Wood-Pewee	*Antrostomus vociferus*	N/A	Special Concern	No
Bird	Grasshopper Sparrow	*Ammodramus savannarum*	N/A	Special Concern	No
Bird	Golden-winged Warbler	*Wermivora chrysoptera*	Threatened	Special Concern	No

Type	Species Common Name	Species Scientific Name	Federal Status	Provincial Status	Suitable Habitat in Study Area
Bird	Henslow`s Sparrow	*Ammodramus henslowii*	Endangered	Endangered	No
Bird	King Rail	*Rallus elegans*	Endangered	Endangered	No
Bird	Least Bittern	*Ixobrychus exilis*	Threatened	Threatened	No
Bird	Loggerhead Shrike	*Lanius ludovicianus migrans*	Endangered	Endangered	No
Bird	Louisiana Waterthrush	*Seiurus motacilla*	Special Concern	Threatened	No
Bird	Olive-sided Flycatcher	*Contopus copperi*	Threatened	Special Concern	No
Bird	Peregrine Falcon	*Falco peregrinus*	Special Concern	Special Concern	No
Bird	Piping Plover	*Charadrius melodus*	Endangered	Endangered	No
Bird	Red-headed Woodpecker	*Melanerpes erythrocephalus*	Threatened	Special Concern	No
Bird	Short-eared Owl	*Asio flammeus*	Special Concern	Special Concern	No
Bird	Wood Thrush	*Hylocichla mustelina*	N/A	Special Concern	No
Bird	Yellow Rail	*Coturnicops noveboracensis*	Special Concern	Special Concern	No
Fish	Black Redhorse	*Moxostoma duquesnei*	N/A	Threatened	No
Mussel	Fawnsfoot	*Truncilla donaciformis*	N/A	Endangered	No
Fish	**Northern Brook Lamprey**	***Ichthyomyzon fossor***	**Special Concern**	**Special Concern**	**Yes**
Fish	Pugnose Shiner	*Notropis anogenus*	Endangered	Threatened	No
Mussel	Rainbow Mussel	*Villosa iris*	Endangered	Special Concern	Yes
Fish	Redside Dace	*Clinostomus elongatus*	N/A	Endangered	No
Insect	Hungerford`s Crawling Water Beetle	*Brychius hungerfordi*	N/A	Endangered	No
Insect	West Virginia White	*Pieris virginiensis*	N/A	Special Concern	No
Mammal	American Badger, jacksoni subspecies	*Taxidea taxus jacksoni*	Endangered	Endangered	No
Mammal	Eastern Small-footed Bat	*Myotis leibii*	N/A	Endangered	No
Mammal	Gray Fox	*Urocyon cinereoargenteus*	Threatened	Threatened	No
Mammal	Little Brown Bat	*Myotis lucifugus*	Endangered	Endangered	No

Type	Species Common Name	Species Scientific Name	Federal Status	Provincial Status	Suitable Habitat in Study Area
Mammal	Northern Long-eared Bat	*Myotis septentrionalis*	Endangered	Endangered	No
Mammal	Tri-colored Bat	*Perimyotis subflavus*	Endangered	Endangered	No
Plant	American Ginseng	*Panax quiquefolius*	Endangered	Endangered	No
Plant	American Hart`s-tongue Fern	*Asplenium scolopendrium var. americanum*	Special Concern	Special Concern	No
Plant	Broad Beech Fern	*Phegopteris hexagonoptera*	N/A	Special Concern	No
Plant	Butternut	*Juglans cinerea*	Endangered	Endangered	No
Plant	Dwarf Lake Iris	*Iris lacustris*	Special Concern	Special Concern	No
Plant	Eastern Prairie Fringed Orchid	*Platanthera leucophaea*	Endangered	Endangered	No
Plant	Gattinger`s Agalinis	*Agalinis gattingeri*	Endangered	Endangered	No
Plant	Hill`s Pondweed	*Potamogeton hillii*	Special Concern	Special Concern	No
Plant	Hill`s Thistle	*Cirsium hillii*	Threatened	Threatened	No
Plant	Houghton`s Goldenrod	*Solidago houghtonii*	Special Concern	Threatened	No
Plant	Lakeside Daisy	*Tetraneuris herbacea*	Threatened	Threatened	No
Plant	Pitcher`s Thistle	*Cirsium pitcheri*	Endangered	Threatened	No
Plant	Tuberous Indian-Plantain	*Arnoglossum plantagineum*	Special Concern	Special Concern	No
Reptile	Eastern Ribbonsnake	*Thamniphis sauritus*	Special Concern	Special Concern	No
Reptile	Massasauga Rattlesnake	*Sistrunrus catenatus*	Threatened	Threatened	No
Reptile	Queensnake	*Regina septemvittata*	Endangered	Endangered	No
Turtle	Blanding`s Turtle	*Emydoidea blandingii*	Threatened	Threatened	No
Turtle	Northern Map Turtle	*Graptemys geographica*	Special Concern	Special Concern	No
Turtle	**Snapping Turtle**	***Chelydra serpentina***	**Special Concern**	**Special Concern**	**Yes**
Turtle	Spotted Turtle	*Clemmys guttata*	Endangered	Endangered	No

The list of potential species at risk within the study area is based on the list for the entire County of Bruce, as provided by the MNRF. The County incorporates a large area and a wide variety of environs that include terrestrial and aquatic habitat. The bridge site spans the Saugeen River within the urban community of Walkerton. The species listed in Table 2.2 were generated on their occurrence across the entire County and as such, many are not likely to occur within the study area. A review of the occurrence data from the NHIC identified Northern Brook Lamprey, Bank Swallow and Snapping Turtle as occurring in the 1 km square where the bridge is located (NHIC 2022). To prevent impacts to the potential species at risk, the bridge will be inspected for bird nests prior to the nesting season (April 1st). If nests are present, proper mitigation measures will be implemented to prevent disturbances to the species. When completing in-water works associated with the bridge replacement, mitigation measures will be followed to avoid or mitigate impacts to fish species. Necessary approvals will be obtained prior to commencement of work.

2.3.7 Breeding Birds

The Atlas of Breeding Birds of Ontario (2001-2005) was used to identify the bird species with confirmed, probable and possible breeding habitat in proximity to the study area. The study area lies within the 100 km^2 area covered in the Atlas as Square 17MJ88, in Region 8: Bruce Region. Within the square, a total of 41 birds are confirmed to be actively breeding, including species at risk such as: Chimney Swift, Bank Swallow, Barn Swallow and Eastern Meadowlark. An additional 28 species were categorized as having probable breeding status and 25 are considered to have possible breeding status in the area (Bird Studies Canada, 2009). The survey area includes key habitat for identified species, such as forests (in all stages of growth), riverine areas, agricultural areas, wetlands and shoreline areas. The project area forms a very small portion of this region and habitat opportunities are limited to the bridge structure.

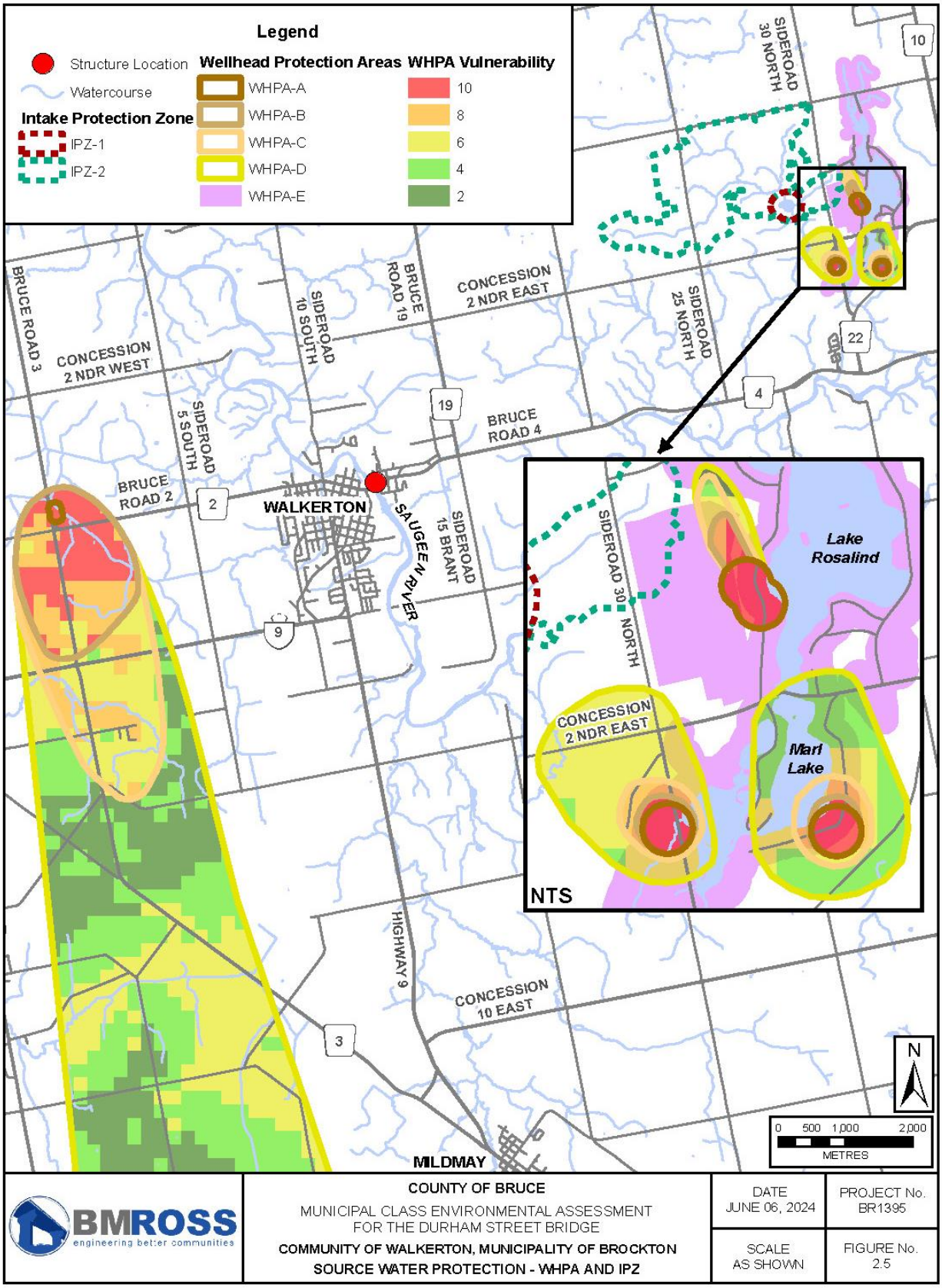
The eBirds website was also consulted to identify the potential presence of bird species within the Walkerton area (Cornell Lab of Ornithology, 2019). The most commonly observed and recorded species in the vicinity of Walkerton include: Bank Swallow, Common Grackle, Northern Rough-winged Swallow, Ring-billed Gull, Rock Pigeon, Canada Goose, Common Goldeneye and European Starling.

2.4 Source Water Protection

The intent of the Clean Water Act (CWA), 2006 is to “protect existing and future drinking water” sources in Ontario. Under the Act, source protection areas and regions were established, giving conservation authorities the duties and power of a drinking water source protection authority. These duties focus on the development, implementation, monitoring and enforcement of information and policies related to source water protection.

The bridge site is located within the Saugeen Valley Source Protection Area. There are no municipal water sources located within the limits of the study area. Figure 2.5 shows the location of municipal wells and associated Well Head Protection Areas (WHPA) that service Walkerton. The Assessment Report for the Saugeen Valley Source Protection

Figure 2.5: Source Water Protection



Area was consulted to determine if the study area has other vulnerable areas present (Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region, 2015). It was determined that portions of the study area are located within a Significant Groundwater Recharge Area. The vulnerability score of the area is 2.

Also of note, Walkerton is serviced with water through a watermain distribution network that is typically located within the limits of the road allowance. An existing watermain is located immediately upstream of the bridge. Following a watermain break that occurred in 2021, the watermain was replaced in 2022. During bridge construction activities, the watermain will be located to ensure that no impacts occur during excavating for the new bridge foundations. As part of the Class EA process, consultation with the local Risk Management Official will also be completed to ensure that the project will result in no impacts to vulnerable areas.

2.5 Climate Change

As part of the Class Environmental Assessment process, the impacts associated with climate change need to be evaluated. Some of the phenomena associated with climate change that will need to be considered include:

- Changes in the frequency, intensity and duration of precipitation, wind and heat events.
- Changes in soil moisture.
- Changes in sea/lake levels.
- Shifts in plant growth and growing seasons.
- Changes in the geographic extent of species ranges and habitat.

There are two approaches that can be utilized to address climate change in project planning. These are as follows:

1) Reducing a project's impact on climate change (climate change mitigation).
   a. Impact of greenhouse gas emissions related to the project
   b. Are there alternative methods to completing the project that would reduce any adverse contributions to climate change?

2) Increasing the project's and local ecosystem's resilience to climate change (climate change adaptation).
   a. How vulnerable is the project to climate-related severe events.
   b. Are there alternative methods of carrying out the project that would reduce the negative impacts of climate change on the project?

Through the evaluation of alternatives phase of the Class EA, a consideration of each of these approaches will be completed and included in the final determination of the preferred approach to completing the project.

2.6 Socio-Economic Environment

2.6.1 Provincial Policy Statement

The Provincial Policy Statement (2020) was issued under Section 3 of *Planning Act* and provides policy direction on matters of provincial interest. Land use planning decisions must be consistent with the policy statements. A number of the policies contained within the PPS have relevance to the current project. These are as follow:

Section 1.6.7 Transportation Systems

1.6.7.1 Transportation systems should be provided which are safe, energy efficient, facilitate the movement of people and goods, and are appropriate to address projected needs.

1.6.7.2 Efficient use should be made of existing and planned infrastructure, including through the use of transportation demand management strategies, where feasible.

1.6.7.3 As part of a multimodal transportation system, connectivity within and among transportation systems and modes should be maintained and, where possible, improved including connections which cross jurisdictional boundaries.

Section 2.1 Natural Heritage

2.1.1 Natural features and areas shall be protected for the long term.

2.1.2 The diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features.

2.1.6 Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.

2.1.7 Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.

2.1.8 Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 2.1.4, 2.1.5, and 2.1.6 unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.

Section 2.2 Water

2.2.2 Development and site alteration shall be restricted in or near sensitive surface water features and sensitive ground water features such that these features and their related hydrologic functions will be protected, improved or restored.

Mitigative measures and/or alternative development approaches may be required in order to protect, improve or restore sensitive surface water features, sensitive ground water features, and their hydrologic functions.

Section 3.1 Natural Hazards

3.1.3 Planning authorities shall prepare for the impacts of a changing climate that may increase the risk associated with natural hazards.

3.1.4 Despite policy 3.1.2, development and site alteration may be permitted in certain areas associated with the flooding hazard along river, stream and small inland lake systems:

b) where the development is limited to uses which by their nature must locate within the floodway, including flood and/or erosion control works or minor additions or passive non-structural uses which do not affect flood flows.

3.1.7 Further to policy 3.1.6, and except as prohibited in policies 3.1.2 and 3.1.5, development and site alteration may be permitted in those portions of hazardous lands and hazardous sites where the effects and risk to public safety are minor, could be mitigated in accordance with provincial standards, and where all of the following are demonstrated and achieved:

a) development and site alteration is carried out in accordance with floodproofing standards, protection works standards, and access standards;

b) vehicles and people have a way of safely entering and exiting the area during times of flooding, erosion and other emergencies;

c) new hazards are not created and existing hazards

d) no adverse environmental impacts will result.

2.6.2 Adjacent Land Uses

Land uses located in the vicinity of the project site include forested areas along the river bank east and west of the bridge, high density residential structures, single family residential buildings, commercial activities south of the crossing and recreational activities. Forested lands owned by the Municipality are located on the south side of the river adjacent to the site with a community trail located adjacent to the river bank.

2.6.3 Land Use Planning

The Walkerton Community Official Plan (OP) and Municipality of Brockton Comprehensive Zoning By-Law (2013-026) were consulted to determine land use designations in the project study area. Wooded lands located adjacent to the bridge site are designated as Environmental Protection in the Walkerton Community Official Plan (OP) and EP: Environmental Protection in the Zoning By-Law. Residential lands located adjacent to the project site area are designated as Residential in the Walkerton Community Official Plan (OP) and R1: Residential Zone 1 and R3: Residential Zone 3 in the Zoning By-Law. Businesses located adjacent to the project site area are designated

as Commercial in the Walkerton Community Official Plan (OP) and C1: Central Business District in the Zoning By-Law. The project site area is located within the flood fringe constraint area of the Saugeen River.

Copies of relevant planning documents are included within Appendix 'C'. Several policies within the Walkerton Community Official Plan and Municipality of Brockton Zoning By-Law (2013-026) have relevance to the current project as follows:

Section 6 – Transportation, in the Walkerton Community Official Plan states the following pertaining to roads:

Section 6 - Transportation

6.1 GOAL
To provide a transportation system which allows for the efficient movement of goods and people, and facilitates economic activities within the Community.

6.2 ACTIONS
a) Promote and improve the system of arterial and collector roads to provide for the safe and efficient movement of local and through traffic.

6.3 ROAD CLASSIFICATION POLICIES
a) ii) Arterial County (Urban): Arterial County (Urban) roads are under the jurisdiction of the County of Bruce. There are two County roads serving Walkerton: County Road #4 and County Road #2. The primary function of the Arterial County (Urban) road is to move relatively large volumes of traffic efficiently through the community. Roads identified as 'County Arterial (Urban) on Schedule 'B' shall generally have a minimum right-of-way of 20 metres (65.61 feet).

Section 3 of the Municipality of Brockton Zoning By-Law (2013-26) states the following:

3.1 PERMITTED USES IN ALL ZONES

3.1.1 Services and Utilities

.1 Nothing contained in this By-Law shall prevent the Corporation; any telephone, cable or communications utility company; any agency or department of the Federal, Provincial or County Government; any company holding a Provincial license to transport or distribute natural gas; an electric service provider; a railway company and any local or County Board or Commission from: road or street or other use for the purposes of the public service subject to compliance with the provisions prescribed for the zone in which it is to be located.

2.7 Cultural Environment

Cultural Heritage Resources include archaeological resources, built heritage resources and cultural heritage landscapes.

(a) Archaeological Resources

Should the preferred alternative include excavation of previously undisturbed areas, a Stage 1-2 archaeological assessment (AA) will be completed by a licensed archaeologist prior to the start of construction. A Stage 1-2 AA consists of a review of geographic, historical and land use information for the property and surrounding area. The Ministry of Citizenship and Multiculturalism (MCM) is contacted to determine if there are known archaeological sites on or near the property and the site is visited. The purpose of the assessment is to identify areas of archaeological potential and further archaeological assessment (e.g. Stage 3-4) is necessary.

(b) Built Heritage Resources

Due to the age of the structure (circa 1930), completion of a Cultural Heritage Evaluation Report (CHER) is required to assess the cultural heritage value of the crossing and to identify potential impacts associated with the project. In February 2021, Timmins Martelle Heritage Consultants were retained to complete the assessment. The determination of cultural heritage value is defined through Ontario Regulation 9/06 of the *Ontario Heritage Act.* Based upon the regulation, various aspects of the structure are examined to determine if they have value within the following categories:

- Design value or physical value;
- Historic value or associative value;
- Contextual value.

The Durham Street Bridge was examined based on the above criteria and was determined to have design or physical value because the crossing is a rare example of what was once a common concrete rigid frame T-beam bridge design with embossed stanchions/pillars, railings, and cantilevered end spans associated with late 1930's provincial bridge construction. The crossing was also determined to have historic or associative value because the bridge is historically associated with the provincial response to and local experience of the Great Depression. The immediate vicinity also holds direct associations with the Saugeen River and historic Walkerton Industry.

Finally, the bridge was also determined to have contextual value because the crossing is a key access point to the area known as Historic Walkerton and is historically linked to the current alignment of historic Durham Street as well as being physically and visually linked to the Saugeen River Trail and canoe traffic on the river. Based on the research and analysis summarized in the CHER, the Durham Street Bridge was determined to meet the Ont. Reg. 9/06 criteria based on its design/physical, historical associative, and contextual value.

(c) Impact Assessment

The report determined that implementation of the project, to rehabilitate the structure by restoring deteriorated concrete and steel components and removing the single load path associated with the half joints, may result in the alteration of heritage attributes at the subject site.

The following measures are recommended to mitigate the impact on heritage values:

i) That where possible and appropriate, the final design of the rehabilitated structure include restoration of previously removed heritage elements including:

   a. New railings of a configuration and darker colour resembling the original railings; and
   b. If the preferred reinstatement of more recent flower boxes and decorative fish proves unfeasible, consider reinstating ornate light standards resembling the original design.

ii) That where possible and appropriate, the final design of the rehabilitated structure include sympathetic modification or repair of any rehabilitated components and especially of heritage attributes, including:

   a. Stylized pile caps/piers;
   b. Embossed stanchions/pillars;
   c. Arched T-Beams;
   d. Railing posts; and
   e. Cantilevered end spans.

iii) The retention and restoration (or enhancement/replacement) of the river traffic sign on the upriver side of the bridge will be necessary to preserve the bridge's link to historically significant river navigation. Any signage related to the Saugeen River Trail that could be impacted by the replacement should also be preserved and restored upon completion.

iv) This report will be submitted to the Bruce County Archives, copying MCM on the accompanying cover letter.

A copy of the Cultural Heritage Evaluation Report and Heritage Impact Assessment is included within Appendix 'D'.

2.8 Identified Structural Deficiencies

Recent engineering inspections of the structure have identified significant concerns with the structural condition of the bridge. These deficiencies were identified within the Ontario Structural Inspection Manual (OSIM) inspection report, conducted by BMROSS in October 2018 and subsequent correspondence to the County of Bruce in June 2019.

The structure was designed with half joints at each end of a drop-in span at the centre of the bridge. This detail has led to problems and even collapses of other similarly-designed structures. The Ministry of Transportation has identified these structures as requiring more invasive investigation and evaluation to ensure they are safe. These types of structures have been phased out or rehabilitated to provide redundancy against sudden failure. Due to the age of the structure and concern over sudden failure of the half joints, replacement of the crossing was initially recommended. A copy of the most recent OSIM report and the June 2019 letter report is included within Appendix 'E':

(a) Summary of Deficiencies

The following represent the primary deficiencies and safety concerns associated with the existing crossing:

- Concrete posts are spalled and delaminated and west railing panel damaged due to vehicle strike.
- North abutment spalling.
- East and west drop-in joints, as noted above.

West Railing Post ↑

North Diaphragm and Soffit ↑

West Drop-In Connection ↑

East Drop-In Connection ↑

(b) Third Party Review – HAL Assessment

In July 2023, the County of Bruce retained the services of Triton Engineering Services to complete a Third Party Review of various components of the Class EA process being conducted for the Durham Street Bridge. This included potential bridge replacement alternatives, detour alternatives and reinforcement measures designed to address deficiencies associated with the half-joints.

To assist with the review the services of the HAL Group Inc. were retained to complete an updated detailed Bridge Condition Survey (BCS), which was completed in October of 2023. The results of the updated BCS were presented to the County of Bruce in January of 2024 and included the following statements:

- The existing bridge is generally structurally sound and rehabilitation should be investigated.
- Rehabilitation could be a feasible and economical solution to extending the overall life of the bridge.
- There is some concrete deterioration at the half joints along with observed heavy impact loading.
- A recommendation was made to correct the half joints by either temporary repair of rehabilitation.

- A recommendation was made to apply a 3-level load limit to the bridge (15:25:30 tonnes) and provide an alternate truck route (Municipal Maintenance and Emergency EMS/Fire Vehicles to be exempt)
- A recommendation was made that a qualified professional complete a visual inspection of the half-joints on a quarterly basis.

On March 7, 2024 a report was presented to Bruce County Council summarizing the results of the Third Party Review completed by Triton Engineering Services. The following recommendations were included in the report:

- That bridge rehabilitation be re-introduced into the MCEA process as a viable alternative for evaluation, in addition to the original bridge replacement option.
- That the County procure the services of an Investigate-Design-Build (IDB) Contractor to complete the repairs of the bridge's half-joints and accompanied bridge elements (Immediate Bridge Repairs) in 2024 in order to maintain safe passage over the bridge while the MCEA process is ongoing.

3.0 CLASS EA PROCESS

3.1 Identification of Problem/Opportunity

The first phase of the Class EA process includes the definition of the problem or opportunities, which need to be addressed. Based on the discussion above, the following problem/opportunity statement has been identified in conjunction with this project:

> *Key components of Durham Street Bridge, which spans the Saugeen River along Bruce Road 4, exhibit advanced deterioration, which if not remediated, may have an adverse impact on the safe operation of the structure.*

Reconstruction or alteration of a structure, or the grading adjacent to it, when the structure is over 40 years old, which after appropriate evaluation is found to have cultural heritage value, requires additional environmental assessment under the terms of the Class EA document.

The County initiated the required Class EA investigation in February 2021. The investigation followed the planning and design process set out for Schedule C activities. Schedule C projects are approved subject to following the full Class EA process which includes the completion of all five phases (i.e., Problem Identification, Evaluation of Alternative Solutions, Identification and Evaluation of Alternative Design Concepts, Preparation and Submission of Environmental Study Report, and Implementation of Preferred Alternative and Monitoring). The purpose of the Class EA process is to identify potential environmental impacts associated with the proposal and to plan for appropriate mitigation of any impacts.

3.2 Identification of Alternative Solutions

3.2.1 General

The second phase of the Class EA process involves the identification and evaluation of alternative solutions to address the defined problems. The evaluation of alternatives is conducted by examining the technical, economic, social, cultural and environmental considerations associated with implementing any alternative. Mitigation measures that could lessen environmental impacts are also defined. A preferred solution or solutions is then selected.

3.2.2 Stage 2: Identification of Practical Alternatives

The purpose of the second stage of this investigation was to define alternative solutions to the identified problems in a manner that minimizes potential environmental impacts. A limited number of practical solutions to the defined problems were identified at the outset of this Class EA process. The alternatives, stated below, build upon the findings of the engineering review discussed previously in this report.

Alternative 1 - Replacement of the Existing Bridge. This alternative would involve the removal of the existing structure and its replacement with a new bridge in the same general location in order to connect to the existing County road network.

Alternative 2 – Repair/Rehabilitation of the Existing Bridge. This option would involve a series of repairs to the existing bridge which, when completed, would remediate the structural deterioration identified by recent engineering inspections.

Alternative 3 - Do Nothing. This option proposes that no improvements or changes be made to address the identified problem. The result could be eventual structural failure of the bridge. During the Class EA planning and design process, the “Do Nothing” alternative may be implemented at any time prior to the commencement of construction. A decision to “Do Nothing” would typically be made when the costs of all other alternatives, both financial and environmental, significantly outweigh the benefits.

3.3 Stage 3: Evaluation of Alternatives

The third stage of the investigation involved the evaluation of the identified alternatives. The purpose of this stage was to examine the potential environmental impacts associated with the proposed works and to examine potential mitigation for any identified impacts. The evaluation stage generally involved the following activities:

- Preliminary technical review of alternatives;
- Selection of a preferred option (preliminary);
- Public consultation;
- Consultation with review agencies;
- Selection of a preferred option (final).

3.4 Preliminary Review of Alternatives

3.4.1 Summary of Required Works

A preliminary engineering analysis was conducted to determine the works required to implement each of the identified study alternatives. Table 3.1 summarizes the findings of that assessment.

Table 3.1
Primary Components of the Identified Alternatives

Alternative	Required Works
Alternative 1	- Replace the existing structure with a new steel beam bridge in the same alignment, spanning the Saugeen River. The replacement structure would be slightly wider than the existing crossing (3.3 metre wide lanes and wider sidewalks). - The bridge would be designed in accordance with established standards of the *2019 version of the Canadian Highway Bridge Design Code* and the *Ontario Provincial Standard Specifications* (OPSS) Division 9, Structures. - New abutments would be constructed in the same general location as the existing, outside of the limits of the channel. - Three piers would be installed in the same location as the existing, less the outside piers.
Alternative 2	- Repair the existing structure to address existing deterioration and damage to the railings, soffits, stanchions and expansion joints. - Repairs to the half-joints would need to address the risks presented by the single load path created by the half joints and remove other deterioration present in the structure. - Patch repair delaminated deck areas. - Repair or replace the existing railings. - Install rock rip rap erosion protection around existing abutments.
Alternative 3	- No additional works proposed.

3.4.2 Environmental Considerations

Section 3.2 of this report listed the alternative solutions that were identified to resolve deficiencies with the existing bridge. As part of the evaluation process, it is necessary to assess what effect each option may have on the environment and what measures can be taken to mitigate the identified impacts. The two main purposes of this exercise are to:

- Minimize or avoid adverse environmental effects associated with a project;
- Incorporate environmental factors into the decision-making process.

Under the terms of the EA Act, the environment is divided into five general components:

- Natural environment;
- Social environment;
- Cultural environment;
- Economic environment;
- Technical environment.

The identified environmental components can be further subdivided into specific sub-components that have the potential to be affected by the implementation of the alternative solutions. Table 3.2 provides an overview of the Specific Environmental Components considered of relevance to this investigation. These components were identified following the initial round of public and agency input, and a preliminary review of each alternative with respect to technical considerations and the environmental setting of the project area.

Table 3.2
Evaluation of Alternatives:
Identification of Environmental Components

Environmental Components	Sub-Components	Specific Components
Natural Environment	Aquatic Environment	- Resident fish species - Aquatic Habitat
	Terrestrial Environment	- Riparian plants - Birds
	Geology/Hydrogeology	- Subsurface conditions
	Hydrology	- Stream flow characteristics - Hydraulic capacity
Social Environment	Community	- Traffic volumes - Vehicular access - Pedestrian & recreational access
	Adjacent Properties	
Cultural Heritage Environment	Archaeological resources	- Archaeological resources and areas of archaeological potential
	Built heritage resources and Cultural Heritage Landscapes	- Identified Heritage Attributes of the Bridge
Economic Environment	Municipal	- Taxes - Capital Costs
Technical Environment	Design Standards	- Transportation - Bridge Design
	Climate Change	- Material selection & design considerations

The environmental effects of each study alternative on the specific components are generally determined through an assessment of various impact predictors (i.e., impact criteria). Given the works associated with the alternative solutions, the following key impact criteria were examined during the course of this assessment:

- Magnitude (e.g., scale, intensity, geographic scope, frequency, duration);
- Technical complexity;
- Mitigation potential (e.g., avoidance, compensation, degree of reversibility);
- Public perception;
- Scarcity and uniqueness of affected components;
- Likelihood of compliance with applicable regulations and public policy objectives.

The evaluation process described above provides the proponent with a methodology to predict the potential effects of alternative solutions. The significance of the identified impacts is largely based on the anticipated severity of the following:

- Direct changes occurring at the time of project completion (e.g., habitat disruption);
- Indirect effects following project completion (e.g., increased sedimentation/ erosion);
- Induced changes resulting from a project (e.g., additional activity in sensitive areas).

3.4.3 General Review of Options

Table 3.3 provides a summary of the key considerations for each option with respect to the environmental considerations described in Table 3.2. To this end, the table identifies those benefits and impacts that were identified as significant during the initial evaluation of alternatives. Potential mitigation measures for the identified impacts are also presented.

Table 3.3
Preliminary Evaluation of Alternatives

Alternative	Benefits	Impacts	Remediation
Alternative 1 (Replacement)	- Provides water crossing for vehicular traffic in accordance with established standards from the 2019 edition of the Canadian Highway Bridge Design Code. - Addresses safety concerns associated with bridge design and deterioration of primary bridge components. - Presents minimal impacts to air quality, noise levels and local aesthetics (following the completion of construction). - Provides improved pedestrian access for residents in the vicinity of the crossing.	- Terrestrial and aquatic features could be adversely affected, as construction would occur within the vicinity of the defined stream channel. - May impact hydraulic capacity of the watercourse. Hydraulic analysis of the new structure will need to be evaluated.	- Implement standard mitigation measures to minimize disruption during the construction phase of the project (e.g., sediment controls). - Consult with the SVCA and DFO to assess the level of impact resulting from construction of the planned works. - Provide mitigation and habitat compensation to address any significant concerns identified.
		- Requires complete removal of the existing structure. Traffic will need to be rerouted during construction process.	- Various detour alternatives will be considered including a temporary bridge or a pedestrian bridge installed during construction.
		- More expensive option.	- Identified impact cannot be mitigated.
		- Cultural heritage features associated with the crossing will be lost.	- Recommended mitigation measures will be incorporated into the design of the new bridge
Alternative 2 (Repair)	- Temporarily addresses some of the safety concerns associated with the deterioration of bridge components. - Presents minimal impacts to air quality, noise levels and local aesthetics (following the completion of construction). - Represents a less expensive option in the short term.	- Terrestrial and aquatic features could be adversely affected, as construction may be required in the vicinity of the defined stream channel. (i.e. shoring and removals) - Repairs would need to address safety issues presented by the current bridge design.	- Implement standard mitigation measures to minimize disruption during the construction phase of the project (e.g., erosion, sediment controls). - Consult with regulatory agencies to assess the level of impact resulting from construction of the planned works. Provide mitigation and habitat compensation, as required.

Alternative	Benefits	Impacts	Remediation
	- Minimizes impacts to residents by permitting traffic to continue over the bridge during completion of the repairs.	- Traffic movement would be disrupted during the construction phase however access over the bridge would be maintained.	- Traffic control measures could be implemented to limit traffic impacts during the construction phase, although lane restrictions, or bridge closure, may be required for short durations.
Alternative 3 (Do Nothing)	- Represents the least expensive option. - Does not impact upon existing natural or cultural features.	- Fails to resolve the defined problem. - Road may have to be closed due to safety issues associated with existing structure.	- Identified impact cannot be mitigated.

3.5 Environmental Effects Analysis

The potential interactions between the project alternatives and the identified environmental components were examined as part of the evaluation of alternatives. The purpose of this analysis was to determine, in relative terms, the environmental effects of the identified alternatives on each the environmental components, using the impact criteria described in Table 3.3. Table 3.4 summarizes the outcome of the environmental effects analysis.

Table 3.4
Environmental Effects Analysis

Environmental Component	Option	Level of Effect	Impact Considerations (Implementation and Operational Activities)
Natural • Aquatic	1) Replacement	Moderate	• Some impacts to aquatic habitat are anticipated as a result of construction-related activities during reconstruction of the abutments and piers. Piers will be replaced in the same location to minimize impacts. Rock rip rap erosion protection would be primarily located outside of the channel. • Sediment and erosion control measures would be implemented during construction to prevent impacts to the aquatic environment. • A mussel search and relocation would be completed prior to construction as well as a fish transfer for impacted areas.
	2) Repair/Rehabilitate	Low	• Limited impacts to aquatic habitat are anticipated as a result of construction-related activities, as repairs to the deck and soffits would be completed without in-water access. • A barrier would be installed below the bridge to prevent concrete chips and debris from entering the channel.
	3) Do Nothing	Low to Moderate	• No Impacts Anticipated. • Should the structure fail and need to be removed, there may be impacts to aquatic habitat which would result during removal.
• Terrestrial	1) Replacement	Low to Moderate	• Some impacts to terrestrial habitat are anticipated as a result of the replacement, although the width of the structure is not changing significantly. Vegetation clearing would be required to access the area. • Disturbed areas would be restored upon completion of work.
	2) Repair/Rehabilitate	Low	• No impacts are anticipated to complete repairs to the deck and soffits.
	3) Do Nothing	Low	• No Impacts anticipated.
• Geology/ Hydrogeology	1) Replacement	Low to Moderate	• Existing abutments will be removed and new abutments constructed to support the new bridge design. • Work would be carried out in accordance with guidelines from geotechnical engineers.

Environmental Component	Option	Level of Effect	Impact Considerations (Implementation and Operational Activities)
			• Dewatering may be required during excavation for, and construction of the new bridge abutments and piers.
	2) Repair/Rehabilitate	Low	• No significant excavation would be required to complete the repairs.
	3) Do Nothing	Low	• No impacts anticipated.
• Hydrology	1) Replacement	Low to Moderate	• Some impacts to hydrology will occur during construction of the in-water piers, as access to the area for construction will require isolation of portions of the channel. • Hydraulics should be improved following the completion of construction by going to three piers from the current five and potentially widening the opening under the bridge.
	2) Repair/Rehabilitate	Low	• No impacts are anticipated
	3) Do Nothing	Low	• No impacts are anticipated
Social • Community	1) Replacement	Moderate to High	• A moderate level of impact to residents is expected during construction due to the required closure of the crossing for approximately 10-12 months during construction. Detour options will be identified during the construction period to minimize impacts. • Access impacts will be relatively short term and once completed, residents will have access to a new crossing with improved sidewalks. • Properties located immediately adjacent to the crossing may experience some impacts related to noise, vibration and access restrictions. The County will work closely with affected properties to minimize impacts as much as feasible.
	2) Repair/Rehabilitate	Low to Moderate	• Some impacts to traffic movement are anticipated during construction but will be for a shorter time period than full reconstruction of the crossings.
	3) Do Nothing	Moderate	• Should existing deterioration on the bridge not be remediated, the structure could become unsafe for vehicles and eventually need to be closed to vehicular traffic.

Environmental Component	Option	Level of Effect	Impact Considerations (Implementation and Operational Activities)
Cultural • Archaeological Resources	1) Replacement	Low to Moderate	• Impacts to buried cultural artefacts would need to be assessed through completion of a Stage 1 & 2 Archaeological Assessment prior to construction.
	2) Repair/Rehabilitate	Minimal/Nil	• Few impacts to archaeological resources are anticipated given that the bridge will remain in place and be rehabilitated.
	3) Do Nothing	Low	• No impacts anticipated.
• Built Heritage Resources and Cultural Heritage Landscapes	1) Replacement	High	• All cultural heritage features would be lost as a result of the bridge replacement. However, mitigation measures identified through the HIA would be incorporated into the design of the new structure.
	2) Repair/Rehabilitate	Low	• Identified cultural heritage features of the crossing would need to be sympathetically restored as part of the rehabilitation work.
	3) Do Nothing	Low to Moderate	• No impacts anticipated initially, however should the deterioration not be remediated and the crossings fail, heritage features could be impacted.
Economic • Municipal	1) Replacement	Moderate	• Construction of a new bridge would result in relatively high capital costs due to the size of the crossing and the detour requirements.
	2) Repair/Rehabilitate	Moderate	• Although repair costs are lower compared to full replacement of the crossing, it would only defer the need for replacement for 15-20 years.
	3) Do Nothing	Moderate	• Repair or replacement of the crossing will need to occur at some point in the next 5-10 years in order to address the deterioration and structural concerns. Costs would be significantly higher should the crossing fail.
Technical • Design Standards	1) Replacement	Moderate	• Moderate impacts to the local transportation network will occur during construction of the new crossing when the road will be closed for a period of 18-24 months. • Identifying a location for a temporary detour may be difficult given the current limitations at the site. • Following completion of construction transportation opportunities will be significantly improved.

Environmental Component	Option	Level of Effect	Impact Considerations (Implementation and Operational Activities)
	2) Repair/Rehabilitate	Low to Moderate	• Some impacts to local traffic are anticipated during completion of the repairs. Although the road will not be closed during completion of the repairs, delays will occur due to lane closures during construction. • Given concerns related to the current bridge design, developing a repair program that address the deterioration and maintains the safety of the crossing must be carefully considered.
	3) Do Nothing	Moderate to High	• No impacts initially, however if the deterioration is not remediated and the crossing fails, this would have a negative impact on residents in the area.
Technical • Climate Change	1) Replacement	Low to Moderate	• Replacement of the crossing would result in some climate change adaptation improvements by increasing the hydraulic capacity of the crossings. • Some negative climate impacts would result from construction-related activities.
	2) Repair/Rehabilitate	Low	• Repair of the crossing would not provide an opportunity to increase the hydraulic capacity of the crossings, making the crossing less resilient to high flows, • Repair of the crossings would minimize climate-related impacts associated with construction activities.
	3) Do Nothing	Low	• Hydraulic capacity of the crossings would not be improved, making the crossing susceptible to climate-related impacts associated with higher flow events. • As no construction would be required, there are no climate impacts anticipated.

3.6 Identification of a Preferred Solution

The relative merits of each option were examined during the preliminary technical review of the study alternatives. Based on this assessment, the County indicated a preference for Alternative 2, repair/rehabilitation of the crossing. There are a number of attributes associated with Alternative 2, which justified its consideration as the preferred bridge alternative (listed below):

- Minimizes impacts to the community and adjacent properties by maintaining access over the bridge during completion of the work;
- Resolves concerns relating to the deterioration of primary bridge components, and concerns related to the bridge design;
- Minimal impact to adjacent natural areas and aquatic habitat features by repairing rather than replacing structure.
- Less expensive than replacement of the crossing.
- Will maintain pedestrian access during completion of construction.

4.0 CONSULTATION PROGRAM

4.1 General

Consultation is an integral component of the Class EA process. Consultation with the public, review agencies, project stakeholders and Indigenous communities allows for an exchange of information, which assists the proponent in making informed decisions during the evaluation of alternative solutions. During Phases 1 and 2 of the study process, consultation was undertaken with each of the groups noted above that might have an interest in the project.

The components of the consultation program employed during the initial phases of the Class EA study are summarized in this section of the screening report and documented in Appendix ‘F’. Comments received through the consultation program and related correspondence are also discussed below and documented in the appendix.

4.2 Public Consultation

4.2.1 Initial Notice

Contents:	General study description, summary of proposed works, key plan
Issued:	February 10th, 2021
Placed In:	Walkerton Herald Times
Circulated To:	400+ property owners
Input Period:	Concluded March 19, 2021

4.2.2 Dedicated Website

A dedicated website for the project was launched in May 2021 at www.walkertonbridgestudy.ca. The site included information on the project, project updates and a contact form where comments could be submitted. Signs were posted adjacent to the bridge site to advertise the project and website address to the travelling public and allow them to visit the website for further information. The website also allowed for additional input to be provided from area residents. Approximately 12 comments were submitted through the website portal. Table 4.1 summarizes the feedback received from residents as a result of the Notice.

Table 4.1
Summary of Public Comments: Initial Consultation Phase

Member of Public	Comments	Action Taken
Walkerton Resident February 22, 2021 (via email to County)	- Expressed concerns with the intersection at McNabb and Durham Street. - Also concerned with pedestrian safety on the bridge particularly during the winter. - Suggested digital signage to slow traffic and better sidewalk maintenance during winter.	- Comments noted and filed.
Riverside Condominiums Board March 1, 2021 (via email)	- Proposed the installation of a bailey bridge or temporary crossing during construction to allow residents without vehicles to access the downtown core. - Suggested a detour option which would involve extending the road in the Industrial Park to connect to Valleyside Drive. This detour would exclude larger vehicles such as transport trucks. - Suggested that bridge sidewalks be wider than existing due to safety concerns. - Suggested improvements to the intersection of William Street N. and Durham Street due to future housing development and resultant increased traffic. Improvements include signage, lane marking and a traffic signal. - Understands that the McNab and Durham St. corner will be improved. Safety concerns are related to illegal left turns out of Tim Horton's exit and proposes blockage of exit to prevent illegal left turns.	- Comments noted and filed.
Property Owner (via email) March 2, 2021	- Suggested two options for detour routes while bridge is replaced: i) A new bridge on south side of Walkerton extending to Conc. 2 SDR over the river connecting to Kincardine St, then Hwy 9. ii) A new bridge connecting Concession 4 NDR west to Conc. 4 NDR east. - Concerned about traffic travelling from east of Walkerton to Bruce Power.	- Comments noted and filed.

Member of Public	Comments	Action Taken
Business Owner (via email) March 2, 2021	- No concerns with bridge replacement. - Concerned with traffic at Hwy. 19 and Bruce Road 3 during construction. Requested that a stoplight be installed at the intersection during construction to decrease high traffic volumes, wait times to turn and accidents.	- Comments noted & filed. - Bruce County responded with plans for upgrades to intersection.
Walkerton Business Owner (via email) March 3, 2021	- Proposed that the bridge be wider for both vehicle and foot traffic. - Expressed concerns about the pedestrian crossing in front of the bridge, but states that a study is already in place addressing the problem.	- Comments noted and filed.
Business Owner (via email) March 4, 2021	- Concerned about detour as many of their employees use the bridge to travel to work and employees travel throughout Walkerton to complete service work. - Suggested that the detour route be in the same area as the existing bridge. - Concerned about pedestrians that use the bridge to travel into town from condos. - Proposed that a walkway be installed for pedestrians. - Suggested two detour options 1) Bridge installation on Cemetery Road connecting to Conc. 2, South Durham Road. 2) Temporary bridge installation from Orange Street to McNab Street.	- Comments noted and filed.
Property Owner (via email) March 4, 2021	- Suggested that better lighting be installed on the bridge as part of the project. - Concerned about accessing town from east side of bridge on foot and proposed a footbridge be installed during construction.	- Comments noted and filed.
Property Owner (via phone) March 4, 2021	- Inquiring about the timing of the bridge replacement. - Concerned about being able to access businesses in town during construction.	- Advised that bridge project is 2-3 years away and there will be opportunities for comments.

Member of Public	Comments	Action Taken
Business Owner (via phone) March 5, 2021	- Inquired about the timing and duration of construction. - Expressed concern about the impact construction will have on his business. - Concerned about lost business due to construction as customers will stop at his business on their way through town. - Inquired if there would be compensation for lost business. - Inquired about dust control. - Inquired about how access will be maintained to his business.	- Comments noted/filed. - Advised that construction could begin in 2024/25 but may take more than 1.5 years. - Advised that start date and construction timing are not fixed and may change. - Discussed the potential for noise/ vibration.
Property Owner, (via email) March 6, 2021	- Concerned that Walkerton has only one access point to the east, which results in large trucks using main streets and causing damage due to wear and tear. - Suggested the installation of a second bridge crossing of the Saugeen River to Conc. 2 Sideroad as it will benefit traffic for both Walkerton and Hanover.	- Comments noted and filed.
Business Owner (via email) April 7, 2021	- Concerned about the bridge replacement as it is near the entrance to his business. - Concerned that vehicles and machinery will block the entrance to his business. - Concerned that his business will suffer since there will be no drive-by traffic and construction will impact the patio during summer months. - Concerned about noise and vibration and the impacts on the building as it is old. - Concerned that his business will impacted during construction and inquired about compensation for lost revenue.	- Comments noted and filed. - Asked for additional details about his business to have a better understanding of how his business operates.
Property Owner, (via phone) April 16, 2021	- Concerned that East Bound traffic will detour east on Concession Road 2 to Hanover causing damage to the road. The existing road is dangerous past Airport Road.	- Comments noted and filed.

Member of Public	Comments	Action Taken
Property Owner, (via email) June 1, 2021	- Suggested that pedestrian safety be considered when designing new bridge. - Stated that the current bridge does not allow a safe distance from traffic to sidewalk. - Suggested that a design similar to the Southampton Bridge would offer greater safety in this location.	- Comments noted and filed.
Property Owner, (via email) June 24, 2021	- Please do not reroute truck traffic through Yonge St. N. This is a dangerous street especially in the summer. Huge farm equipment use it steady and traffic does not slow down to the 40 k that is posted. - When loaded semis go through you can feel ground vibrations. Suggest through Carlsruhe instead. Warning you this street is a dangerous option. Please do not consider it as a detour.	- Comments noted and filed.
Property Owner, (via email) July 7, 2021	- Asked if a footbridge would be constructed over the river to allow bike and walking access to Walkerton for individuals who live east of the bridge. - Should consider impacts to the Saugeen River trail access. - Less concerned about vehicle detours as detouring to Concession 2 does not add a lot of distance or time to their route.	- Comments noted and filed. - Advised that impacts to pedestrians and cyclists are being considered.
Hanover Resident Aug. 28, 2021 (via email)	- While construction is ongoing, suggest a Bailey bridge over the river (south) between Cemetery Road & Con. 2 SDR. (Should be a permanent bridge but that\'s another story).	- Comments noted and filed.
Walkerton Resident Sept. 2, 2021 (via email)	- So, replace the thing! What questions do you have for us residents of town? This thing is far too vague.	- Comments noted and filed.
Walkerton Resident Oct. 4, 2021 (via email)	- I look forward to hearing about the new bridge. It would be nice to have one that spanned right across the river to allow fewer obstruction for boats/rafts and less chance of debris to get caught up in it. - Also for the detour route, which I\'m assuming will be over Lobbies Bridge, a temporary traffic (with pedestrian lights) light set up for the summer would be appreciated with the extra traffic. - Sidewalks on both sides of the bridge would be nice as well.	- Comments noted and filed.

4.2.3. October 4, 2022 Public Information Meeting

A public information meeting was arranged to provide additional information to residents on the Class EA alternatives which were identified for the project. Notice of the public meeting was mailed to adjacent property owners who were initially notified about the project. The notice was also published in the local newspaper and emailed to residents on the EA contact list.

The meeting was held at the Walkerton Community Centre on October 4, 2022 from 6:00 p.m. to 8:00 p.m. Project details were presented by staff from B.M. Ross & Associates using a power point presentation. Following the presentation there was a question and answer session. Display boards were also mounted around the perimeter of the room with additional project details. The general purpose of the meeting was to provide residents with the following:

- Project background
- A summary of the Schedule ‘C’ Class EA process
- A summary of input received from the public and agencies
- A description of the alternatives, including potential cost estimates
- A description of specialized studies completed to date

A comment sheet was provided to residents in attendance at the meeting asking them to provide input on the project. There were approximately 45 residents and stakeholders in attendance at the meeting. Notes can be found in Appendix ‘F’ along with a copy of the presentation material. A summary of feedback received following the public meeting is included below.

Table 4.2
Summary of Public Comments: October 4, 2022 Public Meeting

Member of Public	Comments	Action Taken
Walkerton Resident October 4, 2022 (via Comment Sheet)	- Concerned with long-term asset management. - Suggested using thicker layer of asphalt on bridge and approach roads to better maintain the asset. - Concerned that costs to upgrade detour roads would be more than a temporary detour bridge. - Concerned with impacts to trucking org. from having to detour during construction. - Wondered about upgrades at McNabb and Durham Street intersection.	- Comments noted and filed.
Walkerton Resident October 4, 2022 (via Comment Sheet)	- Concerned with lack of information available about the bridge project prior to the meeting. - Contacted Brockton and the County prior to the meeting and was told that the focus was on the Paisley Bridge. - After attending the meeting was satisfied with the information presented. - Questioned what would be done to address flooding on Yonge Street north of Lobies Bridge. - Wondered if the pipe installed adjacent to the Durham Street Bridge was for drinking water and whether sewage pipe were also being installed. - Questioned plan for the McNabb Street intersection which was mentioned in an article in the Walkerton Herald Times.	- Comments noted and filed. - Contacted by phone to respond to questions.
Walkerton Resident October 4, 2022 (via email)	- I look forward to hearing about the new bridge. It would be nice to have one that spanned right across the river to allow fewer obstruction for boats/rafts and less chance of debris to get caught up in it. - Also for the detour route, which I\'m assuming will be over Lobbies Bridge, a temporary traffic (with pedestrian lights) light set up for the summer would be appreciated with the extra traffic. Sidewalks on both sides of the bridge would be nice as well.	- Comments noted and filed.

Member of Public	Comments	Action Taken
Walkerton Business Owner October 5, 2022 (via email)	- I was at the Bridge Study last night, and I take it that the County of Bruce really doesn't want to go ahead with the temporary bridge due to cost. Without this temporary bridge the downtown core will lose 12,000 cars per day. If you look at this from a business owners perspective that is over half of our venue that will be lost. - This will cause approximately half the businesses in the downtown core to close prematurely. There are many that are already struggling due to covid and some that may not even recover. Recession is on its way. If the county has any interest in Walkerton to survive as a business community there needs to be a temporary bridge no matter the cost. Please figure out how much tax money and Revenue would be lost if half the downtown core businesses closed. It's a no brainer we need this temporary bridge. Unless all businesses are going to supplemented in some way due to not putting in a temporary bridge This caused a lot of people to be upset last night at the meeting and many more as the word gets out. Is the county really that hard done by, our taxes for a small community are very high compared to other counties. This is 3 years away and there should be ample time to put aside 6 million for a temporary bridge. Also you stated that it would take an extra 8-10 minutes for ambulance or fire to arrive, that amount of time could be life or death, so you basically said that people's lives don't matter, shame on the county of Bruce This matter is not done. - So many more reason this bridge is needed Thanks for listening to my rant. You can reach out at any time	- Comments noted and filed.
Walkerton Resident Oct. 10, 2022 (via email)	- I have given a lot of thought re: Walkerton's bridge replacement after the information meeting last Tuesday evening. - I know a Bailey bridge is an excessive amount of money but feel it is necessary. This is not a short-term project. Sixteen months is a long period of time (if it is even done in 16 months). I am an elderly person who lives in the Riverside condos just east of the bridge. I am also President of the Condo Board so am concerned for all 46 owners in these buildings. A major concern is the response time for ambulance and fire department to attend	- Comments noted and filed.

Member of Public	Comments	Action Taken
	emergencies. Winter storms could also impact response times resulting in loss of lives. Seniors driving country roads in winter conditions is definitely not ideal either. One loss of life is one too many! - I also have concerns that some children will not have access to the soccer fields or parents who have worked all day may be rushed in getting their child there resulting in speeding! Businesses east of the bridge may also be impacted. I have also heard remarks that some may drive to Hanover to shop versus driving the detour. I, for one, am a dedicated Walkerton shopper and feel that during this time of disruption, local businesses need out support more than ever before. -In a letter I wrote about 1 1/2 years ago, I expressed deep concern regarding the exit from Tim Horton's to Durham St. Please refer to that letter. Although it is well marked and signage in place, people continue making illegal left turns and coming straight at the traffic turning right off McNab St. I have also witnessed vehicles coming from the east and turning into Tim Horton's when it is clearly marked "exit only". Hopefully, this exit will be removed. - A flashing light at the William St. Intersection would also be a step toward a safer intersection. - Thank you for your consideration of the above concerns not only on behalf of owners of the Riverside Condos but of all residents and businesses east of the bridge.	
Walkerton Residents October 22, 2022 (via mail)	- Concerned about pedestrian access over the bridge during construction for residents living east of the crossing particularly seniors. - Worried that the walking portion of the bridge will not be wide enough with the pillars and flower boxes encroaching into the space. - Support the proposed detour option but want to ensure that roads are upgraded in advance and that winter maintenance is considered. - Also regard for farm machinery using the roads on a daily basis. - Questioned how school buses will be impacted by the detour. - Questions plans for the McNabb and Durham intersection.	- Comments noted and filed. - Response sent by mail.

Member of Public	Comments	Action Taken
Walkerton Resident Oct. 31, 2022 (via comment sheet)	- Suggested that the bridge railings remain open and low to allow views of the river up and downstream. Suggested similar design to the Southampton Bridge over the Saugeen. - Thinks that at minimum a pedestrian bridge needs to be installed during construction to allow residents and disable individuals to cross the river. Costs are too high for a temporary vehicle bridge. - Noted importance of emergency response access during construction and suggested providing a secondary location on the east side during the project.	- Comments noted and filed.
Walkerton Resident Nov. 2, 2022 (via email)	- One of the preferred options is to have traffic diverted north on Young St. over Lobies Bridge. The Valleyside /Young Street intersection is already dangerous. - We have had many near misses and the increased traffic will almost certainly cause collisions. Most years Young St. floods in spring. - Also Young and Durham is at times difficult as sight lines are blocked due to parking bylaws not being enforced. A temporary replacement to handle the traffic is not created with this option only a diversion to an already substandard road.	- Comments noted and filed.
Walkerton Resident Nov. 13, 2022 (via email)	- For safety reasons could a cross walk be included in the new bridge construction? - I understand a temporary bridge is not being built. - Thoughts to ponder on a shuttle. - Pick up, drop off, how many times a day, will there be a charge. - How to handle appointments to Dr., Dentist, hospital, hair dressers, other medical providers, massage, hearing, - Chiro, church, downtown activities, and the Independent Grocers is not part of downtown. - How to carry groceries from store to shuttle and from shuttle to residence. - An acknowledgment of this e-mail would be appreciated.	- Comments noted and filed.
Walkerton Resident Nov. 14, 2022 (via email)	- It is important to consider a slow traffic sign. it is dangerous at the entrance of William St.	- Comments noted and filed.

Member of Public	Comments	Action Taken
Walkerton Resident Nov. 27, 2022 (via email)	- How will emergency services be impacted for residents that live on the East end of Walkerton. It is very concerning that fire, police and ambulance response times will be increased living on the opposite side of these services. The condominium buildings on William Street house an elderly population. - Having a detour that runs out County Road 19 is not very practical in an emergency situation. And with the current hospital closures in the area. You cannot say that we are now to go to Hanover or Chesley as you cannot guarantee they are open at all times. - There needs to be through access through town in some way. Cutting off access to a small area is not fair as a taxpayer. The simple task of getting mail will become a huge task unless Canada Post puts some boxes on this end of town. It's a small volume of people on the East side of Walkerton. But the emergency services need to be addressed. Our local hospital has departments that operate on a call in basis during off hours (Laboratory/Diagnostic Imaging) and if they happen to live on the wrong side of bridge their response times to an emergency at the hospital would greatly be impacted. Paisley didn't cut their town in half and neither should Walkerton.	- Comments noted and filed.
Walkerton Resident Nov. 30, 2022 (via email)	- Nowhere in the presentation do I see concerns about Emergency services. Without building a temporary bridge it will greatly impact fire, police and ambulance services. Having most of these services not on the East side of the bridge it is a huge concern. - In the William Street condo's there is a high elderly population. With hospital closures in the healthcare system which is likely to get worse, telling residents to go to Hanover or Chesley may not be an option at the time and only Walkerton is open. But you have to drive a good 20 mins to get to Walkerton hospital which should only take you 5 minutes now. Could be the difference between life or death. - The Walkerton hospital has departments that operate on an on call basis (Laboratory/ Diagnostic Imaging) and need to be within 20mins of hospital. If they have to detour all the way around how will that impact patient care.	- Comments noted and filed.

Member of Public	Comments	Action Taken
	- Simple tasks currently such as getting the mail will also become a huge inconvenience unless Canada post is to put mailboxes on the East side of town. Has a detour been looked at through Cunningham Drive into Karin Crescent and Valleyside Drive? Would not require a temporary bridge and would also not cut a town in half from emergency services?	
Walkerton Business Owner January 23, 2023	- I am writing this email on behalf of His Style Men's Wear downtown Walkerton. My wife, and I are the owners of the business. We are looking for more information on the Walkerton bridge re construction. Two things we are after would be; i) The date of the next public meeting regarding the bridge study, ii) The process in which we can request an economic impact study. Thanks for your time in advance.	- Information noted and filed.
Brockton Resident Feb. 17, 2023 (via email)	- Hi. I am a resident on the north side of Concession 2 on the proposed bypass route. Is there a planned construction schedule for upgrade to this portion of road.	- Advised that a date has not yet been confirmed.
Brockton Resident Feb. 26, 2023 (via email)	- I'm in grade seven at WDCS in Walkerton. I am currently working on a school project writing a news article. I have chosen to report local news, specifically the bridge replacement in Walkerton. I was wondering if you could answer some questions so I can get a quote. These are the questions 1) Was there consideration given to constructing a temporary bridge at the south end of town connecting cemetery road to the south line? 2) A similar project is currently on going in Paisley, what lessons or information has been learned that will be applied to the Walkerton bridge replacement project? - Thank you for your time. Kind regards,	- Responded to the questions.
Brockton Resident March 6, 2023 (via email)	- Please send all documentation regarding all by-pass temporary bridges for vehicles or foot traffic. I own a couple of properties on William Street I would like to know how I might be affected.	- Provided details related to the proposed detours.

Member of Public	Comments	Action Taken
Kincardine Business Employee May 9, 2023 (via email)	- As this has been brought to my attention via social media, it is not just Walkerton businesses that will feel the affects of this disruption. I'm employed at Becker Shoes, Kincardine. Our supply truck travels to the Hanover location and other locations weekly for our shoe deliveries. As our, Kincardine downtown, is going thru a Big Dig presently to update our water and sewer lines, we understand the necessity for repairs. It's other businesses that will have to adjust to this repair/detour. UPS depot is located in Hanover, our business deals with them daily.	- Thanked them for providing the comments.
Walkerton Business Owner May 11, 2023	- My concern as a resident and small business owner of Walkerton. - I clean houses all around town, going to be very inconvenient if there is no route through town. I live on Old Durham Road. It will affect time management & scheduling. - Concerned for emergencies both fire and medical. It will be a nightmare for everyone to come out at Lobbies Bridge… what if Lobbies floods that will be a disaster. Just will be a huge inconvenience all around.	- Information noted and filed.

4.2.4. May 11, 2023 Information Meeting for Businesses

A public meeting was arranged to provide additional information to Walkerton Businesses on the Class EA process, the proposed detour, and possible mitigation measures to address impacts to businesses. Notice of the public meeting was mailed to business owners in downtown Walkerton. The notice was also published in the local newspaper and was advertised on local radio stations the week of the meeting.

The meeting was held at the Walkerton Community Centre on May 11, 2023 from 6:30 p.m. to 9:30 p.m. Project details were presented by staff from BMROSS using a power point presentation. Following the presentation there was a question and answer session and a brainstorming session hosted by the Bruce County Economic Development Department. Display boards were also placed along the side of the room with additional project details. The general purpose of the meeting was to provide business owners and residents with the following:

- Project background
- A summary of the Schedule ‘C’ Class EA process and input received from agencies.
- A description of the detour alternatives, including potential cost estimates
- A description of detour upgrades proposed for the local detour alternative

A comment sheet was provided to residents in attendance at the meeting asking them to provide input on the project. There were approximately 127 residents and business owners in attendance at the meeting. Notes can be found in Appendix D along with a copy of the presentation material and presentations from business owners during the Question and Answer session following the formal presentations. A summary of feedback received following the public meeting is included below.

Table 4.3
Summary of Comments: May 11, 2023 Meeting for Businesses

Member of Public	Comments	Action Taken
Walkerton Resident (via comment sheet) May 11, 2023	- How will people with disabilities ride the bus and will they be able to transport the scooters?	- Comments noted and filed.
Walkerton Resident (via comment sheet) May 11, 2023	- Right at Cemetery Road across river (New Bridge) - To South Line, left to Volkswagen corner with stop lights then right to Hanover - Old bridge - walking bridge.	- Comments noted and filed.
Walkerton Business Owner (via comment sheet) May 11, 2023	- Old Garage – will there always 100% of the time be access to my business - Dust and blowing dirt blowing on my customers enjoying the patio eating - Noise/vibrations for customers enjoying the patio. - Vibrations to the Old Building - Truck + equipment parked in front of the store - Will there be signage saying there is access to the Old Garage. - What steps can I take if trucks, equipment etc., are affecting my business.	- Comments noted and filed.
Walkerton Resident (via comment sheet) May 11, 2023	- Why is the community meeting in July when many people are away on vacation.	- Comments noted and filed.
Brockton Councillor (via comment sheet) May 11, 2023	- Bruce County env impact study - Have you considered that 2,000,000 extra litres of detour gas emits 5,000 tonnes of CO2 in our area. 1 litre = 2.5 kg of CO2.	- Comments noted and filed.
Walkerton Resident (via comment sheet) May 11, 2023	- Will the bridge replacement include a pedestrian crossing on Durham Street to connect the two sections of the Saugeen River Trail? - At present, there is no provision for pedestrians to cross Durham Street safely.	- Comments noted and filed.

Member of Public	Comments	Action Taken
Brockton Councillor (via comment sheet) May 11, 2023	- I support a pedestrian bridge but also strongly suggest a permanent bridge from the South Line to Cemetery Road. This could be used for truck traffic during construction but also plan for the growth of Walkerton.	- Comments noted and filed.
Walkerton Resident (via comment sheet) May 11, 2023	- The difficulties of a temporary bridge were well presented. But the costs of failure to provide a temporary bridge were also very well presented. - I believe that needs much more of a careful look.	- Comments noted & filed.
Walkerton Business Owner (via comment sheet) May 11, 2023	- If a detour bridge costs 6.3 m and a new bridge 9 m I think we should build a permanent bridge at the detour location and have 2 crossings.	- Comments noted & filed.
Walkerton Resident (via email) May 15, 2023	- I am a resident of Walkerton and, full disclosure, I live on the west side of the Saugeen River. The impact of the bridge being out does not affect me as much as it will affect those people living on the east side of the river. - I attended the first meeting in October 2022 and also the meeting on May 11th. I was very happy that a more efficient microphone system was used – it was much easier to hear the participants. Unfortunately, when people were given the opportunity to ask questions from the floor it was almost impossible to hear. I recognize that questions from the floor was not part of the agenda and it should have stayed that way. Questions from the floor should be an option at the next meeting – with appropriate guidelines in place. - There is an overwhelming need for continued discussion regarding a temporary pedestrian bridge and a temporary vehicle bridge. The discussion on May 11th began with excellent presentations from business owners who are facing significant impacts to their livelihoods. As a result of their presentations more questions needed to be answered.	- Comments noted and filed.

Member of Public	Comments	Action Taken

	- Has there been any considerations to building a temporary single lane vehicle bridge combined with a pedestrian bridge? Could a single lane vehicle bridge be built with stop lights at either end? I believe that most people would be happier with a stop light situation than the proposed detour route around County Rd. 19, Concession 2 and Young St.
	- Could a temporary bridge be built to the south of Tim Horton's, through the vacant lot on McNabb Street crossing over to Orange Street? If a temporary bridge could be built, could it be restricted to passenger type vehicles, not transport trucks or farm machinery? If a single lane vehicle bridge could be built with a pedestrian walkway, most of the concerns from the residents on the east side of the river would be solved.
	- I have more concerns and questions as a result of attending this meeting.
	  - Shuttle bus schedule, pick up locations and cost need to be reviewed and explained.
	  - The truck detour route needs to be determined and explained to the public.
	  - Where will be contractor's equipment be stored?
	  - More information about possible grants is needed. Could some of the possible grants be used to offset the cost of a temporary vehicle/pedestrian bridge?
	  - When will the Fire Department concerns be explained and dealt with?
	  - Maintaining open roads during the winter season and flooding season could be challenging. The impact for first responders is a significant issue. More information about plans for keeping roads open needs to be provided.
	- I would like to express my concern about the timing of the next public meeting. Waiting until July when many residents will be on vacation means that providing information to residents is difficult. Planning for a public meeting in July means that the opportunity to attend, ask questions and express concerns may be limited.	

Member of Public	Comments	Action Taken
	- Thank you for the opportunity to ask questions and express concerns.	
Business Owner (via email) May 17, 2023	- I'm submitting comments on the replacement of the Saugeen River Bridge in Walkerton and I would like these comments added to the public record. - After attending the business meeting on May 11th 2023 at the Walkerton Arena I have several concerns about the County of Bruce's detour plans. The whole plan to detour tens of thousands of cars for months at a time is poorly thought out. Here are the reasons why. - Firstly, Adam Stanley, Engineering Manager, spoke to the audience about the "hefty cost" of the bridge replacement as well as the "hefty cost" of a temporary bridge. Allow me to do some math. - The normal route from Bruce Road 19 to the end of the bridge in town is 1.34 km. - The detour route from Bruce Road 19 to the end of the bridge in town is 6.84 km. - The difference is 5.5 km. - Adam Stanley told us that 12,000 cars a day on average, use Durham St in Walkerton and Bruce Road 4. Adam is Engineering Manager for the Department of Transportation and Environmental Services and he knows the facts. - The additional km driven per day, on average will total 66,000 km. - Using the Canadian Revenue Agency mileage rates for 2023 at $.68 per kilometre that will add up to $44,800 per day in extra expense for residents and visitors. - Over a 18 month period, assuming no delays, the total EXTRA transportation cost for residents will be $24,528,000. - There is no way that local residents and visitors should carry this burden of cost on themselves, when a temporary bridge will cost $6.3 million even without a grant from another level of government. - The lack of consideration for local residents is appalling.	- Comments noted & filed.

Member of Public	Comments	Action Taken
	- Secondly, there is no alternative for people who do not drive if they cannot walk downtown. Bruce County itself admits there is no public transit in the county. - Page 11 of the Plan the Bruce: Business – discussion paper says directly “transportation networks are lacking, no public transit”. - PTB Business Draft Discussion Paper (002).docx (ehq-production-canada.s3.ca-central-1.amazonaws.com) - Adam mentioned a shuttle service that would run 12 hours a day. He did not say what 12 hours, what the cost would be or how it would work during winters with Bruce Road 19 closed from or springtime when Yonge St North can be flooded. - Wishful thinking does not make a good solution to the detour. A temporary bridge will allow people to walk and things in town to remain mostly normal. - Lastly, no one at the meeting from the County of Bruce mentioned anything about the economic impact of disconnecting one side of Walkerton from the other side. It appears as though, for now, they don’t regard any economic impact as important since it was not mentioned. - Jeff Loney, Economic Development Manager was present, spoke briefly and asked that everyone there come up with ideas to market the disconnected town with an “activity”. It was a failure. His job, as referenced in his job title is to manage economic development and he had no ideas how to do that. He suggested a passport stamp used other times in the county but had no information on its effectiveness, when used in other areas. - The best solution for economic development is to install a temporary bridge and allow commerce to continue its natural pace. - The meeting was time limited and questions from the audience were ignored and then halted. Adam repeatedly said there will be no more questions allowed and then made himself unavailable. - Thank you for taking the time to add this to the record.	

Member of Public	Comments	Action Taken
Resident, (via email) May 19, 2023	- Was unable to attend the meeting on May 11 the concerning the closure of the bridge in Walkerton but would like to voice my concerns. - Closing this bridge with no connecting bridge in place would very definitely heap more hardships on our businesses in the community. This following the many hardships felt during the Covid closures. I really think this would be totally unfair to our community. - No connecting bridge would also place undue hardships on the people who live on the east side of the river denying them direct access to health care professionals. In an emergency situation this could prove critical. - Anyone could maybe put up with this situation for a short term but this proposal is not for a short timeframe. The proposed closure is at least 18 months with the possibility of it being even longer. - I truly feel this proposal is entirely unacceptable and would like to see this matter addressed with a temporary bridge replacement.	- Comments noted & filed. - Response provided.
Walkerton Resident (via email) May 29, 2023	- Inquired if a wooden bridge design had been considered for the permanent vehicular replacement bridge. - Stated that they heard that Grey County has installed wooden bridges and the installation timeframe is less than 18 months, but that the environmental parameters could take longer through the approval process.	- Comments noted & filed. - Response provided.
Walkerton Resident (via email) June 5, 2023	- When they replaced the main bridge in Wasaga Beach they did one side at a time. Maybe this could be looked into as an option.	- Comments noted & filed. - Response provided.
Walkerton Business Owner (via email) June 5, 2023	- My suggestion is to build a new bypass bridge and road to connect Cemetery Road to the South Line of Brant. After it is built a 25 tonne load limited should be placed on the current bridge to allow cars and local truck deliveries and extend the life of the structure. Some rehabilitation would be required to reinforce the drop-in section but the repairs could be staged to keep one lane open at all times.	- Comments noted & filed. - Response provided.

Member of Public	Comments	Action Taken
Walkerton Resident (via email) June 6, 2023	- Since the county has known that this bridge needed to be replaced for many years, they can DO BETTER for Walkerton residents and businesses then an out-of-town bypass as a solution while the bridge is being replaced. What's wrong with building the new bridge RIGHT BESIDE the old bridge?? And why aren't we being asked what we would like? - Small businesses are hanging on by a thread after COVID and now because of the economy. WE CANNOT TAKE ANOTHER HIT. - Do not make us suffer because of your poor planning.	- Comments noted and filed. - Comments acknowledged.
Walkerton Resident (via Council Mtg) June 6, 2023	- Advised that the Walkerton Homecoming is taking place in 2026.	- Comments noted and filed.
Concerned party (via email) June 7, 2023	- I saw the news story about your bridge replacement for 2025. It seems "carbon-unfriendly" to force people to make a 7 km detour because someone's too cheap to put in a Bailey bridge. - Here's an idea. Can they build the new bridge to one side, and when it is ready, tear down the old one and slide the new one into place? It has been done before, as long ago as the 1970s when they built a very large bridge in Europe and slid it over when it was ready. That would cut the closure to a week, or less!! - Yukon did it also, sliding one section of an old bridge sideways while the new bridge was built on the same road alignment, 2009-2010. - I sent this message on Monday but it had an attachment, and I'm worried you probably didn't get it or it went to spam because of that. It was an article about a construction project where an existing bridge was moved to a temporary detour while the new bridge was built. I haven't heard a reply, so I am resending this without the document.	- Comments noted and filed. - Response sent.
Walkerton Resident (via email) June 7, 2023	- Please keep us connected to the downtown by installing a temporary bridge. Thank you	- Comments noted and filed. - Comments acknowledged.

Member of Public	Comments	Action Taken
Walkerton Resident (via email) June 7, 2023	- Walkerton needs to stay connected	- Comments acknowledged. - Comments noted & filed.
Walkerton Resident (via email) June 8, 2023	- Good morning! I can't believe it's even being considered to cut our town in half for a minimum of 18 months!!! - A temporary bridge needs to be erected during the replacement period. Yes it will cost $6.5 million but it's worth it. Our town is thriving right now but cutting it in half will set us back 10 years!! Not to mention how inconvenient it will be for all those people on the other side to get to downtown. You will be encouraging them to shop in Hanover instead of driving the back roads to get to downtown. Absolutely ridiculous! We need a temporary bridge!! -Concerned citizen and taxpayer	- Comments noted & filed. - Comments acknowledged.
Worker in Walkerton, (via email) June 8, 2023	- Wow does Walkerton make themselves sound like entitled brats. Who cares what paisley did! Walkerton should be its own identity. For the amount it's going to cost to fix the bridge I most certainty hope Walkerton doesn't have any future repairs or costs the town would require to spend money on in the future. I am not a resident of Walkerton but I work there and this seems like a waste of your tax paying dollars. Not only is this a ridiculous request for the amount of money it's going to cost it will cause huge delays. Big trucks will not be able to use the bridge; a detour will still be required. Remember when the truck went on the bridge in paisley.... what if that happens again? Not only is this request a bigger structure, it was also pointed out to me the bridges are not bot policed.... at least until someone is injured or dies because they don't read a sign and/or follow rules! Since big trucks can't be on the bridge many vehicles will still be detoured and what happens in the winter? That's a large slippery bridge and I can't imagine having a plow on a temporary bridge.	- Comments noted and filed.

Member of Public	Comments	Action Taken
	- Instead of wasting literally millions of dollars take some of that money and use it to maintain and plow (seasonal) current roads and a future detour. This would get the bridge repaired a lot quicker, efficiently and save some money. - I have driven back and forth to Walkerton at least 5 days a week (20 times approx a week) for 9 years. Not once have I complained about gas, (which I am not reimbursed for) or about the amount it costs me. If people need to go to or through Walkerton a detour will not prevent that. Stop your complaining! Let's get the bridge fixed quickly and efficiently without spending ridiculous amounts of your tax paying money!	
Walkerton Resident (via email) June 8, 2023	- Keep Walkerton connected. They need a temporary bridge while the new bridge is being constructed.	- Comments acknowledged noted & filed.
Walkerton Resident (via email) June 10, 2023	- Dear Walkerton Bridge Replacement Committee; Please accept this as my objection to your current proposal of detouring traffic 7 kms during the replacement of the main vein bridge in Walkerton. Your current plan will no doubt put all of us at risk if we don't have another bridge, regardless of which side of the bridge we're on. It doesn't just cut us in two. There are a number of serious concerns both economically and/or life threatening. - Fire/Paramedics would have an extra 7 kms to travel to get to an emergency East of the bridge and if we have a big fire on either side of the bridge that requires assistance from other fire departments, that's a long detour when seconds count. - We have 2 doctors and at least one nurse living east of the bridge who would also be delayed at getting to the hospital in an emergency. - What happens when County Road 19 is closed during winter storms? Or if/when Lobbies Park/Yonge St. North floods out in the spring? How do people get to work or to the hospital or grocery stores for basic needs if the roads are closed? No shuttle can help with that.	- Comments noted & filed. - Response provided.

Member of Public	Comments	Action Taken
	- Yonge St. North is a 40 km zone as a child was killed at the Valleyside intersection some years ago (RIP Molly McDonald). North of that is a steep hill. Although there is a proposed truck route, I\'m sure some trucks will attempt this detour to save time. What happens when they can\'t make that hill in the winter? It's a single lane in both directions and could cut off traffic for hours. They get stuck on the west and east hills as it is, and they're 50 km zones. - Our local businesses would take a huge loss given no traffic flow for 18 months - 2 yrs. It would be economical suicide. - How do people get to work on either side of the bridge if they don't drive or have a car? There's no taxi services in town anymore and a shuttle would have to run 24/7 to accommodate those who work shifts but again, if the roads are closed due to weather conditions, it wouldn't help anyways. - Causing thousands of dollars of extra expense (especially to east side residents) per household/ driver in vehicle wear & tear, gas and time for them to get to work, access schools, basic needs and medical care, is unjust to say the least. A temporary or permanent bridge is a MUST for both pedestrians and vehicles. We've had over 80 yrs to prepare for this. A better plan has to be implemented without putting lives and livelihoods at risk. We MUST do better.	
Walkerton Resident (via email) June 11, 2023	- A detour is not fair for Walkerton business owners… build them a bridge similar to Paisley…	- Comments noted & filed. - Confirmed receipt.
Walkerton Resident (via email) June 11, 2023	- Need bridge there for the safety of other people on the other side in case of fire and health reasons too far to go around. A life could be lost by the time they get there.	- Comments noted & filed. - Confirmed receipt.
Walkerton Resident (via email) June 15, 2023	- A Bailey bridge needs to be placed for motorists and walkers to access downtown Walkerton and allow travellers to pass through the Main Street of Walkerton while the main bridge is being replaced.	- Comments noted and filed.

Member of Public	Comments	Action Taken
Resident, (via discussion with Jeffrey Loney, Bruce County Economic Development) June 15, 2023	- Indicated a need for an economic impact study for how businesses may be affected during the closure of the Durham Street Bridge. - Discussed the specific impact of mileage. Believes there will be a significant impact on choosing the detour. Based on a 0.50$/km rate and approximately 12,000 movements across the bridge, the detour has the potential to make up $34 million in costs to the taxpayer. - Inquired about the impact of similar projects in other communities. - Inquired about the process to provide input on the proposed solution and where is best to advocate to ensure that his comments regarding a negative economic impact are considered in the decision making process. - Requested to see Economic Development advocate for an option selected by the local community throughout the internal County processes, prior to a report being brought forward to committee for consideration. - Requested a discussion on a committee and a liaison during this process and when that should occur. This assumes the committee goal is to focus on what supports are needed for the business community, regardless of options selected by council moving forward.	- Comments noted and filed.
Walkerton Business Owner (via email) June 15, 2023	- I have additional comment/question I would like to ask in regards to the Environmental Assessment. - Although the economic impact portion has not really been evaluated. - Does the County of Bruce take into consideration that 2 of their municipalities are currently experiencing financial losses in the retail small business sector. The communities being Paisley + Kincardine (I understand Kincardine is a municipal project) - However, that being said if Walkerton's bridge project doesn't include vehicle movement by means of a bailey bridge, is the County of Bruce measuring the long term financial effects on the County as a whole? - Unemployment Rates - Business retention - Business growth + new business opening	- Comments noted & filed. - Response provided.

Member of Public	Comments	Action Taken
	- Donation amounts small business contribute back to the community. - Wouldn't the economic downturn be detrimental and the recovery long term as a County, with three municipalities being hit back to back essentially?	
Walkerton Resident (via email) July 4, 2023	- I would like to attend a public meeting. Please supply the date. Also I vote for a temporary bridge across Durham St within walking distance of old Durham Rd to be built. I live in Walkerton.	- Comments noted and filed.
Walkerton Resident (via email) July 5, 2023	- I am writing on behalf of "Keep Walkerton Connected," a group of concerned voters and local business owners. You may have heard about our recent petition. We now have over 1,000 signatures. This is in addition to over 100 local businesses that have signed. - The supporters of the petition are asking for a temporary bridge and do not want a detour. Here is a link: https://link.edgepilot.com/s/f0f65de3/B8Mc4Zrky0iIiai6BUIrnQ?u=http://www.change.org/keepwalkertonconnected - I encourage you to read the comments on the petition as well. - Keep Walkerton Connected has also formed a facebook group which now has 350 followers: https://link.edgepilot.com/s/657a0adb/I18hi8s_mk6znTSEeNuxTA?u=https://www.facebook.com/keepwalkertonconnected.	- Comments noted and filed. - Receipt of petition was acknowledged.
Resident (via online petition) June, 2023	- In addition to points made above: what happens if lobbies park floods in the spring? Or the detour road is closed for multiple days in the winter? I can't see the detour being able to handle the volume of traffic seen on a daily basis between Walkerton and Hanover.	- Comments noted and filed.
Resident (via online petition) June, 2023	- It's not simply about inconvenience. It's a safety concern and puts additional pressure on an already understaffed and overworked emergency services system; a solution should absolutely be a priority to Bruce County.	- Comments noted and filed.

Member of Public	Comments	Action Taken
Resident (via online petition) June, 2023	- Aside from the obvious concerns of Emergency Services being re-routed such a long distance when seconds count, we also have 2 Doctors and at least one nurse living on the East side who may need to get to the Hospital quickly as well. What happens when County Rd. 19 is closed in the winter due to storms, or when Lobies Park area floods in the Spring? It could be days before these roads open. Not all people drive, but they work on both sides of the bridge, some of which work shift work. A shuttle service would have to run 24/7 to provide the demand for transportation but it still won't help if the roads are closed. We've had over 80 years to come up with a viable plan to replace the bridge. We have to do better than this. Allowing the current proposal to move forward would be economical suicide. At the very least, a temporary bridge for both pedestrians & vehicles is necessary in order to avoid putting lives and livelihoods at risk.	- Comments noted and filed.
Resident (via petition) June, 2023	- A 7km detour is not acceptable.	- Comments noted and filed.
Resident (via petition) June, 2023	- The community just assumed that the county would take care of us, and put the temporary bridge in. No one realized that the "best option" would be a 7km detour. We need to find a way to keep Walkerton connected!	- Comments noted and filed.
Resident (via petition) June, 2023	- This Community NEEDS access to both sides of the Saugeen River. A temporary bridge has worked well in Paisley. A 7 km. Detour is not the answer, especially for Emergency Vehicles.	- Comments noted and filed.
Resident (via petition) June, 2023	- I work in Hanover and it will add to my work day as well as getting my granddaughter to and from activities. Not to mention, extra cost to me for wear and tear on my vehicle and gas.	- Comments noted and filed.

Member of Public	Comments	Action Taken
Resident (via petition) June, 2023	- The path you put on the table isn't going to cut it.	- Comments noted and filed.
Resident (via petition) June, 2023	- It is a terrible idea.	- Comments noted and filed.
Resident (via online petition) June, 2023	- I'm concerned for the industry that relies on timely shipping and receiving. Industry that helps employ people in the area. Having direct access to the job allows for more time with businesses, medical, groceries. If there's no alternative that is quick then these people will start going to other accessible locations. - Please RETHINK YOUR DECISION! We are taxpayers who pay you to do the right thing.	- Comments noted and filed.
Resident (via petition) June, 2023	- Both sides of the township need to be connected especially for emergencies!!!	- Comments noted and filed.
Resident (via online petition) June, 2023	- Our trucks drive multiple times per day over this bridge. Having to drive around will cost our business extra time on labour, fuel, tires. Which is not environmentally conscious either.	- Comments noted and filed.
Resident (via petition) June, 2023	- Business cannot exist without a supply chain. The citizens of Walkerton and area require continued access.	- Comments noted & filed.
Resident (via petition) June, 2023	- I believe there is a better solution then what is being put forth at this time.	- Comments noted and filed.
Resident (via petition) June, 2023	- Concerned primarily with emergency vehicles having to take precious time on an alternate route!!	- Comments noted & filed.
Resident (via petition) June, 2023	- Just doesn't make sense for the community and its residents!	- Comments noted and filed.

Member of Public	Comments	Action Taken
Concerned Party (via petition) June, 2023	- I know this town and it is unreasonable to expect people to drive all the way around.	- Comments noted & filed.
Resident (via petition) June, 2023	- I agree that small businesses should not be impacted for that long.	- Comments noted & filed.
Resident (via petition) June, 2023	- I was born in Walkerton & this seems ridiculous!	- Comments noted & filed.
Resident (via online petition) June, 2023	- Despite the arguments on both sides of this debate, I do not see why Walkerton should be denied a temporary bridge when Paisley was given that benefit, given that there were detour options in Paisley as well.	- Comments noted & filed.
Resident (via petition) June, 2023	- A baily bridge is essential to local businesses who will suffer greatly if not put in. If Paisley can put one in, so can Walkerton!	- Comments noted and filed.
Resident (via petition) June, 2023	- They put a temporary bridge in paisley what makes us different? That's a ridiculous detour!	- Comments noted and filed.
Resident (via petition) June, 2023	- Emergency responders, those who don't drive, local businesses will be tough to survive.	- Comments noted & filed.
Resident (via petition) June, 2023	- A 7 km detour is unacceptable	- Comments noted & filed.
Resident (via petition) June, 2023	- Another source of travel needs to be examined before the bridge can be repaired. A road created from valley side to soccer fields. - A bridge put back on cemetery road connecting to the south line.	- Comments noted and filed.

Member of Public	Comments	Action Taken
Resident (via petition) June, 2023	- It will be very inconvenient if I need to travel around through Carlsruhe when my hair stylist is downtown.	- Comments noted and filed.
Resident (via petition) June, 2023	- Our road is dangerous enough without added traffic	- Comments noted and filed.
Resident (via petition) June, 2023	- Find an alternative other than a 7 km detour. This detour will have devastating effects to the community in general.	- Comments noted and filed.
Resident (via online petition) June, 2023	- The loss of revenue for the main street community will be horrendous and the additional travel for the local residents will be costly with the price of extra fuel for an additional 1-2 years.	- Comments noted and filed.
Resident (via online petition) June, 2023	- I live on the south side of Walkerton. My shop/ business is on the other side of town I make several trips to my shop daily. This is going to cost me large to make the detour around, not to mention the time.	- Comments noted and filed.
Resident (via online petition) June, 2023	- It will be difficult for medical personal, ambulances, fire fighters, & people in general… we did a bailey bridge in Paisley, surely you can do it there with some thought.	- Comments noted and filed.
Resident (via petition) June, 2023	- Without a temporary bridge, there will be many safety issues.	- Comments noted and filed.
Resident (via online petition) June, 2023	- We need to be able to get to both sides of Walkerton. I do not wanna see all or even some of the business close do to this bridge replacement project.	- Comments noted and filed.
Resident (via petition) June, 2023	- By not adding a temp bridge, you are disconnecting a town not only from the businesses but from each other.	- Comments noted and filed.

Member of Public	Comments	Action Taken
Resident (via petition) June, 2023	- Not having a way to get downtown is ridiculous.	- Comments noted & filed.
Resident (via online petition) June, 2023	- It's important to our business sector to stay connected and would cause a strain on our emergency resources to those on the east side of the bridge.	- Comments noted and filed.
Resident (via petition) June, 2023	- This is the most ridiculous plan of them all.	- Comments noted and filed.
Resident (via petition) June, 2023	- Everything listed above is accurate, we need to think of all of our people. And accommodate everyone as best we can.	- Comments noted and filed.
Resident (via online petition) June, 2023	- I'm concerned about emergency response times since Fire and EMS are on one side of bridge and OPP is on the other (especially in winter). Also the economic impact on local businesses would be devastating and will affect the whole community one way or another.	- Comments noted and filed.
Resident (via online petition) June, 2023	- I am concerned about the citizens living on the east side of the bridge who walk daily to stores. Some do not have a mode of transportation to get around a detour or to the next town over.	- Comments noted and filed.
Resident (via online petition) June, 2023	- I'm concerned about emergency response times since Fire and EMS are on one side of bridge and OPP is on the other (especially in winter). Also the economic impact on local businesses would be devastating and will affect the whole community one way or another.	- Comments noted and filed.
Resident (via online petition) June, 2023	- I am concerned about the citizens living on the east side of the bridge who walk daily to stores. Some do not have a mode of transportation to get around a detour or to the next town over.	- Comments noted and filed.
Member of Public (via email) November 27, 2023	- Relatives told me of the need to rebuild Walkerton's bridge over the Saugeen on Durham St heading east to Hanover. The concern is highway 4 will be interrupted since there is no space at the existing bridge site to provide a temporary crossing during construction.	- Confirmed receipt of their comments.

Member of Public	Comments	Action Taken
	- I'd like to suggest building a second bridge reaching west from Orange St/William Street, connecting to McNabb north of the NAPA dealer. - The function of the bridge on highway 4 is too important to lose, even temporarily. Community safety and emergency response are obvious reasons to maintain a traffic link during the main bridgeworks. I have attached a quick sketch showing the suggested location for the bypass bridge. After the rebuild on Hwy 4, the suggested bypass could be kept as an emergency and/or recreation route if it is undesirable to have regular vehicle traffic there. It would be a good place for fishing, for example. This bypass location is far enough from the main bridge site that construction of the bypass bridge would not impede traffic on the existing bridge. - I believe the grading on both banks of the Saugeen at my suggested crossing location would make a (temporary?) bridge feasible, but I defer to your engineers.	- Advised that a detour had been considered in the location they identified but that a preferred approach had not yet been selected.

4.2.5 Media Coverage

Table 4.4 summarizes media coverage of the project following the meeting with business owners.

Table 4.4
Media Coverage of the Durham Street Bridge Project

Article Title	Link	
Walkerton bridge project raises concerns for business owners	Walkerton bridge project raises concerns for business owners | CTV News	June 5, 2023
Walkerton businesses concerned about impact of bridge replacement	Walkerton businesses concerned about impact of bridge replacement | Owen Sound Sun Times	June 6, 2023
Walkerton Businesses form “Keep Walkerton Connected” Facebook Group	Walkerton Businesses form “Keep Walkerton Connected” Facebook Group | The Ranch 100.1 FM	June 6, 2023

4.2.6 May 1, 2024 Public Information Meeting

A public information meeting was arranged to update residents on the current status of the project. Notice of the meeting was mailed to adjacent property owners who were initially notified about the project. The notice was also published in the local newspaper and emailed to residents on the EA contact list. The meeting was held at the Walkerton District Knights of Columbus Hall on May 1, 2024 from 7:00 p.m. to 9:30 p.m. Project details were presented by staff from Pullman and BMROSS using power point presentations. Question and answer sessions followed the presentations. Display boards were also provided with additional project details. The general purpose of the meeting was to provide residents with the following:

- Introduction to the Pullman Group and immediate repairs that will be completed.
- Project background including bridge deficiencies and history.
- A summary of the Schedule ‘C’ Class EA process.
- A description of the alternatives and the recommended bridge alternative selected.
- Proposed project schedule and next steps.

A comment sheet was provided to residents in attendance at the meeting asking them to provide input on the project. There were approximately 83 residents and stakeholders in attendance at the meeting. Notes can be found in Appendix ‘F’ along with a copy of the presentation material. A summary of feedback received following the public meeting is included below.

Table 4.5
Summary of Comments: May 1, 2024 Public Information Meeting

Member of Public	Comments	Action Taken
Member of Public (via website)	- Kind of making all of us truck drivers days a lot longer with these detours. Considering you haven't even started working on the bridge not sure why we're being rerouted?!	- Explained why weight restrictions were implemented.
School Board (via comment sheet) May 1, 2024	- Provided contact information for the Transportation Planner. - Requested a meeting.	- Information documented. - Meeting to be scheduled.
Walkerton Resident (via comment sheet) May 1, 2024	- Inquired if a permanent pedestrian crossing will be installed where the Saugeen Trail crosses Durham Street. - Noted that this is a life threatening location for pedestrians.	- Information noted & filed. - Response provided via email.
Walkerton Resident (via comment sheet) May 2, 2024	- Thought the meeting was well done and was informative. - Was concerned with access to Bruce Road 4 from Elm Street during construction, given the lane restrictions.	- Information noted & filed. - Response provided via email.
Walkerton Resident (via email) May 2, 2024	- I walk over the bridge regularly and sometimes in the evenings, and have noted that the lights appear much dimmer than the new ones that have been previously installed. (For safety reasons, I have carried a flash light to improve my vision, especially on the bridge). - My question is, "Will there be new and brighter lighting installed on the bridge?" - I look forward to your response.	- Information noted and filed. - Advised that bridge lighting was the responsibility of Municipality of Brockton.

4.3 Review Agency Circulation

Input into the Class EA process was solicited from government review agencies and stakeholders by way of direct mail correspondence. Agencies and organizations that might have an interest in the project were sent information detailing the nature of the proposed works, an outline of the assessment process, and a location plan of the project site. Photographs of the project site and surrounding properties were also incorporated into the location plan. Details are included below. Table 4.6 summarizes the comments received as a result of this consultation.

Contents: Background information, location plan, site photos
Circulated: February 10, 2021
Distributed To: 12 review agencies/stakeholders
Input Period: Concluded March 19, 2021

Table 4.6
Summary of Agency Comments

Agency	Comments	Action Taken
Gregg Furtney, Director of Operations, Municipality of Brockton (via email) Feb. 16, 2021	- The Municipality of Brockton is aware of this project and certainly supports it. This bridge structure is an important part of Brockton, Walkerton specifically. It is a main arterial road in and out of our Municipality. Traffic access around this structure, during construction, will be very important to Brockton and we'd like to participate in that discussion as it will impact and affect both residents and businesses. - Please keep us updated as the project continues. We look forward to working with you and Bruce County on this project.	- Information noted and filed
John Strader, Roads Manager, Municipality of Brockton (via email) Feb. 16, 2021	- I am interested in the detour routes, as our roads are not built to withstand that amount of traffic and are not built to full load rated roads. The Municipality may require some kind of compensation for damages to our roads, or possibly help to improve them before the detour takes place, I would like to be involve in these discussions	- Information noted and filed
Barb Slattery Ministry of the Environment, Conservation and Parks (via email) March 3, 2021	- Acknowledged that Bruce County will follow requirements for Schedule "C" projects. - Stated that through an environmental study report, the County is required to address impacts to source protection, climate change adaptation and mitigation to species at risk & their habitats. - Advised that consultation with Aboriginal communities that could be impacted by the project is required. - Noted recent changes to the provincial environmental assessment process. - Stated process relating to submission of Notice of Completion and Part II Orders.	- Information noted and filed.
Mark Coleman Municipality of Brockton, Parks and Recreation (via email) March 10, 2021	- Interested in the pedestrian crossing options between the bridge and the intersection to the west as the trail head is on the north and south sides of Durham St. do not align. - The access to the trail/river between Tim Horton's and the river on the SW corner of the bridge is of concern. - We maintain and have an interest in the planters on the bridge railings. - Would have to check with our Clerk's Depart for any easements for the trail.	- Comments noted and filed.

Agency	Comments	Action Taken
Joseph Harvey Ministry of Heritage, Tourism, Sport and Culture Industries March 12, 2021 (via email)	– Interested in the project as it relates to their mandate of conserving Ontario's cultural heritage. – Suggests that we engage with Indigenous communities, Municipal Heritage committees, historical societies and other local heritage organizations to discuss known or potential cultural heritage resources. – Provided a Cultural Heritage & Archaeological Assessment checklist and information relating to the checklist. – Requires us to contact them once the checklist is complete to advise them if any technical cultural heritage studies will be completed. Technical heritage studies must be submitted to them before issuing a Notice of Completion or beginning work on-site. – Advised that technical heritage studies and recommendations are to be addressed and incorporated into the Class EA process.	- Information noted and filed. - Heritage Assessment initiated for the structure.
Erik Downing Saugeen Valley Conservation Authority (via email) March 17, 2021	– Interested in receiving additional information and reports associated with Class EA. – Advised that a SVCA permit will be required for the proposed works. – Stated that 2009 Engineered Floodplain mapping is available for the project area. – Noted that SVCA manages the dyke system for the Town of Walkerton including the location of the project area.	- Information noted and filed.
Bluewater District School Board (via email) March 19, 2021	– Received letter relating to the Class EA. – Requested that they be included in the process as they are concerned about traffic and pedestrian detours. – Stated that detours will affect bus routes and students walking to school.	- Information noted & filed. - Said that project is scheduled for 2023/24.
Fiona Hamilton, Clerk Municipality of Brockton (via email) April 11, 2024	– Sent comments on behalf of the Council of the Municipality of Brockton. – Thanked the County of Bruce for attending a Municipal Council meeting to provide an update on the Class EA. – Pleased that additional alternatives were investigated and that resident's concerns were considered.	- Information noted and filed.

4.3.1 Project Update Letter

Following selection of a preliminary preferred alternative for the project, an update letter was compiled which summarized the alternatives identified and which alternative had been selected as the preliminary preferred by the County of Bruce. The information was forwarded to the review agencies that were initially contacted in regards to the Class EA on May 23, 2024. A summary of feedback received as a result of the update letter is included in Table 4.7.

Table 4.7
Summary of Agency Comments from Updated Letter

Review Agency	Comments	Action Taken
Stu Moffat, Manager of Operations, Municipality of South Bruce (via email) May 24, 2024	– The Municipality of South Bruce has no comments or concerns to the EA for the Durham Street Bridge in Walkerton.	- Information noted and filed
Monika Macki, Environmental Resource Planner, MECP May 27, 2024 (via email)	– Thank you for the email. – I see that this project was initiated in 2021 and an acknowledgement letter was sent from Barbara Slattery (MECP). – Was a notice of commencement sent for this project?	- Confirmed that a Notice of Commencement was sent and provided copy.
Joseph Harvey Ministry of Citizenship and Multiculturalism May 31, 2024 (via email)	– Thanks for providing us with the attached notice. Our initial advice, sent on March 11, 2021, is attached above. – To assist us in tracking archaeological assessment reports, please provide us with the Project Information Form (PIF) #(s) of any archaeological assessments being prepared for this project. – Please let us know if the project has been screened for impacts to known (previously recognized) or potential built heritage resources and cultural heritage landscapes. We continue to recommend that the Municipal Heritage Bridges Cultural, Heritage and Archaeological Resources Assessment Checklist be completed. Any recommended technical cultural heritage studies (e.g., Cultural Heritage Evaluation Reports, Heritage Impact Assessments etc.) should be sent for our review as part of the environmental assessment process.	- Information noted and filed. - Copy of updated CHER/HIA forwarded to MCM.

Review Agency	Comments	Action Taken
Dylan Birley, Supervisor of Transportation Student Transportation Services Consortium of Grey-Bruce (via email) May 3, 2024	– My planner and I attended the open hall discussion at the Walkerton Knights of Columbus this week. We are working with our service providers and route plans to work around your plans for this project as best we can. Currently we have 18 large school buses utilizing this bridge twice a day which will be affected. This is hundreds of students that will have changes or delays to their transportation schedules in the Municipality of Brockton. – May I please ask for the stage 1 and stage 2 depictions provided at the meeting of the traffic flow plans as soon as you can, we are sitting down with our service provider early next week and some of your visuals will help with these conversations.	- Stage 1 & Stage 2 Traffic Plans forwarded as requested.
Nicholas Schnurr, Director of Operations Municipality of Brockton June 5, 2024 (via email)	– Please see comments from Brockton Operations and Emergency Services in relation to the Durham Street Bridge EA. • 1. Sidewalks – Staff note that the rehabilitation option will not address the substandard width of sidewalks on the existing bridge. This presents dangers to walking residents as well as the sidewalk maintenance machine, being barely wide enough to pass safely across the structure. This has also been raised as an accessibility concern when two parties meet, or for individuals using motorized assistant devices. The proposed new bridge would have seen a wider sidewalk for safer maintenance and passage. • 2. McNabb and Durham Street Intersection and Crosswalk – Staff note that Brockton Council has brought this concern forward many times. The County has indicated to staff through discussions that this is indeed part of their phased plans. However, we do wish to comment again that this cross walk and intersection safety is a priority for the community and construction of the crosswalk should be coordinated with that of the construction on the bridge to limit	- Comments forwarded to Bruce County. - Information added to consultation summary for EA.

Review Agency	Comments	Action Taken
	lane closures on Durham Street. Further, we would ask that they please keep Brockton informed of the final design. • 3. Emergency Services Access – Staff note that based on the current proposal there is no plan in place to prioritize emergency services for access to the bridge during the rehabilitation. Based on the congestion of the area on the west end of the bridge, vehicles will struggle to pull over far enough to allow emergency vehicles access to cross the bridge. Further the proposed temporary traffic lights cannot prioritize emergency vehicles forcing responders to wait for the oncoming traffic to clear which could significantly delay response times. There are multiple options that could be considered by project managers to minimize these impacts during emergency responses. Thank you,	

4.4 Indigenous Community Consultation

4.4.1 Indigenous Consultation Process

The Crown has a duty to consult with First Nation and Métis communities if there is a potential to impact on Aboriginal or treaty rights. This requirement is delegated to project proponents as part of the Class EA process, therefore the project proponent has a responsibility to conduct adequate and thorough consultation with Aboriginal communities as part of the Class EA consultation process.

4.4.2 Background Review

In order to identify Aboriginal Communities potentially impacted by the project the Aboriginal and Treaty Rights Information System (ATRIS) was consulted. A search was conducted for Aboriginal Communities, including their traditional territories, that would lie within a 50 km radius of the project study area. Utilizing this process and feedback received from the MECP, six aboriginal communities/organizations were identified in conjunction with this project including: Chippewas of Saugeen First Nation, Chippewas of Nawash Unceded First Nation, Saugeen Ojibway Nation (SON) – Chippewas of Saugeen & Chippewas of Nawash, Historic Saugeen Métis, Metis Nation of Ontario, and Great Lakes Métis Council. Correspondence was subsequently forwarded to each community/ organization detailing the proposed project and asking for input.

Contents: Background information, location plan, site photos, response form
Circulated: February 10th, 2021
Distributed To: 6 Indigenous communities
Input Period: Concluded March 19, 2021

Table 4.8 summarizes the comments received as a result of this consultation.

Table 4.8
Summary of Indigenous Comments

Aboriginal Community	Comments	Action Taken
Historic Saugeen Métis (via email) March 10, 2021	- Confirmed that the Historic Saugeen Métis (HSM) Lands, Resources and Consultation has received notice of the Durham Street Bridge Class EA. - Expressed appreciation for the opportunity to consult on this project. - Interested in receiving updates about the project as it proceeds.	- Comments noted and filed.
Chippewas of Saugeen First Nation	No Comments.	- No Action Required
Chippewas of Nawash Unceded First Nation	No Comments.	- No Action Required
Saugeen Ojibway Nation (SON) – Chippewas of Saugeen & Chippewas of Nawash	No Comments.	- No Action Required
Metis Nation of Ontario	No Comments.	- No Action Required
Great Lakes Métis Council	No Comments.	- No Action Required

4.4.3 Project Update Letter

Following selection of a preliminary preferred alternative for the project, an update letter was compiled which summarized the alternatives identified and which alternative had been selected as the preliminary preferred by the County of Bruce. The information was forwarded to the Indigenous Communities that were initially contacted in regards to the Class EA on May 23, 2024.

A summary of feedback received as a result of the update letter is included in Table 4.9.

Table 4.9
Summary of Indigenous Comments from Update Letter

Aboriginal Community	Comments	Action Taken
Historic Saugeen Métis	No Comments.	- No Action Required
Chippewas of Saugeen First Nation	No Comments.	- No Action Required
Chippewas of Nawash Unceded First Nation	No Comments.	- No Action Required
Saugeen Ojibway Nation (SON) – Chippewas of Saugeen & Chippewas of Nawash	No Comments.	- No Action Required
Metis Nation of Ontario	No Comments.	- No Action Required
Great Lakes Métis Council	No Comments.	- No Action Required

4.5 Class EA Schedule

The preliminary preferred alternative, to repair/rehabilitate the Durham Street Bridge, was presented to County Council on June 20, 2024. Council was supportive of this option as it addressed the deterioration present in the crossing while also allowing traffic flow to be maintained on the crossing, a significant concern within the community.

The Municipal Engineers Association Class EA document was updated in March 2023 and February 2024. Both of the updated EA documents were reviewed to determine the most appropriate EA Schedule associated with the repair/rehabilitation of a structure determined to have cultural heritage value or interest. In both documents, the repair/rehabilitation of the Durham Street Bridge was determined to be a Schedule B activity and/or subject to an Archaeological Screening Process that would potentially exempt the project from the formal EAA process.

Given that the County was three years into the Class EA process and there was significant interest from the public in the outcome of the EA process, a decision was made to proceed with finalizing the formal EAA using Schedule B and publishing the Environmental Report at the conclusion of the process.

5.0 ADDITIONAL STUDY INVESTIGATIONS

5.1 Hydraulic Report

A Hydraulic Report was completed by BMROSS in October 2022 to review relevant background information and hydrotechnical design criteria for the preliminary design of the proposed Durham Street Bridge replacement structure and possible temporary detour bridge. The preliminary design assessed the hydraulic adequacy of the existing crossing, and identified constraints and sizing for the design of the proposed structures. This was achieved by completing:

- a desktop review to collect information on the crossing and upstream watershed, including previous flood studies;
- a hydrologic analysis on streamflow gauges on the Saugeen River to confirm design flows at the replacement and temporary bridge locations;
- a hydraulic analysis to evaluate conditions at the existing bridge, to evaluate proposed alternatives for the replacement bridge, and to evaluate proposed alternatives for the temporary detour bridge;
- a scour assessment to determine appropriate rock protection;
- an assessment of potential ice jam conditions at the crossings; and
- an assessment on floodplain fill impacts.

(a) Design Criteria

The design criteria for the proposed replacement and temporary structures included the following:

- Bridge Design Code requirements for design flood flows, allowable vertical clearance, and freeboard;
- Integration with existing flood protection measures (dyke system);
- Allowable increase in the flood elevation upstream of the structure;
- Ice jam assessment;
- Scour and rock protection design;
- Floodplain fill and storage analysis.

(b) Previous Hydraulic Models and Floodplain Mapping

The most recent hydraulic study for the community of Walkerton was completed as part of the 2009 Walkerton Floodline Mapping study by Greenland Consulting Engineers. The Saugeen River was modelled with HEC-RAS. Modelling was provided by SVCA with permission from the Municipality of Brockton for use in the current study. The 2009 HEC-RAS model was based on a previous 1983 HEC-2 model. Updates to the model included information collected as part of Greenland's field investigations including bridge geometry and nine survey (9) transects of the Saugeen River. Model cross-

sections considered the existing flood protection works using a levee control. Flow area behind the dyke was considered effective in the model. The model did not include buildings as obstructions, but included increased manning's n. The 2009 study indicated that the existing dyke system will contain the 100 yr event and the regulatory Hurricane Hazel event will overtop the dyke system. Effects of the Truax Dam removal were studied in the 2009 Greenland study and further assessed as part of the 2018 GSS/ Greenland study for the partial removal of the dam. Both the original 2009 and subsequent 2018 study indicated that the flooding impact of the Truax Dam is limited to the area locally around the dam. The dam removal has not impacted flood levels at the Durham Street Bridge location based on 2009 and 2018 studies.

(c) Model Results

The updated 2022 BMROSS model results were checked for consistency against the previous 2009 model with partial dam removal (2009 HEC-RAS Model Plan: Saugeen ModifyND). Differences in water surface elevations between the 2009 model and the updated model are provided in Appendix A, Table A2. Differences in water surface elevations for the 100 yr and Regulatory Hurricane Hazel event are mostly attributed to changes in bridge modeling routine to allow pressure and weir flow, as well as spill at low points at Yonge Street Bridge, as summarized in Section 8.2. Upstream of Yonge Street Bridge water levels are reduced by 0.48 m on average with a maximum 0.79 m reduction for the Regulatory Hurricane Hazel event. Minor differences of 0.05 m is observed for the 100 year event. The impact is observed for the entire reach from Yonge to Durham Street. Minor differences in water surface elevation are observed upstream of Durham Street Bridge due to updates in bridge geometry and design and details of the Truax Dam removal. The updated model is considered appropriate for a basis of comparison between existing and proposed structures.

(d) Recommendations for Durham Street Bridge

(i) Option 1: A three span structure with span lengths of 18.58 m, 17.39 m, 18.58 m and low concrete elevation of 247.53 m or Option 2: A three span structure with span lengths of 21.6, 24.2 m, and 21.6 m with a low concrete elevation of 247.46 m, may be used for the final design of the Durham Street Bridge across the Saugeen River in the community of Walkerton.

(ii) For future resiliency and climate change considerations, it is recommended that the bridge railing/parapet be designed with solid concrete panels such that the bridge may be integrated into potential future dyke upgrades. The level of flood protection with proposed railing/parapet will be confirmed with the Saugeen Valley Conservation Authority (SVCA) at the detailed design stage.

(iii) Rip rap protection, nominal 400 mm stone, should be placed at the bridge site.

(iv) In case there is a forecast high-water event, construction contingency plans should include the stockpiling of sandbags or steel sheet piling to fill any breach in the dyke at Durham Street generated as part of replacement bridge construction. Full restoration of all affected dyke segments will be included in the contract.

(e) Recommendations for the Temporary Detour Bridge

The Class EA is investigating detour options for local and through traffic as well as pedestrians. Detour options include detouring using County roads, local roads and the potential installation of a temporary bridge crossing. A temporary detour structure option would involve a twin span modular steel panel bailey bridge with a total span length of 75.5 m. The temporary bridge option has been designed to the 100 year event and will pass the design event with 0.21 m clearance. The design of the structure and low steel elevation has been iterated to reduce flood impacts of the structure. For the 100 year design event, flood impacts of the potential structure are estimated at 0.04 m immediately upstream and 1.3 m of freeboard to the dyke is provided. Due to the temporary condition of the structure, this impact is considered acceptable. It is therefore recommended that:

(i) The proposed twin span temporary detour bridge structure connecting McNab Street and Orange Street, be considered for final design if selected as the preferred detour alternative through the Class EA.
(ii) Rip rap protection, nominal 300 mm stone, should be placed on the stream banks for erosion protection at the temporary bridge site.
(iii) In case there is a forecast high-water event, construction contingency plans should include the stockpiling of sandbags or steel sheet piling to fill any breach in the dyke at the temporary detour bridge location. Full restoration of all affected dyke segments would be included in the contract.

A draft copy of the Hydrology Report was submitted to SVCA staff in July of 2021 for their input and review. The report will be finalized once input from SVCA is received. A copy of the Draft Hydrology Report is included within Appendix G.

5.2 Geotechnical Assessment

(a) General

A Geotechnical Investigation was completed by Peto MacCallum Ltd. Consulting Engineers in March of 2023. The report noted that the work was being undertaken to assess subsurface conditions at the site in advance of the bridge's replacement.

The field work consisted of the completion of 7 boreholes, with 4 deep boreholes, with a borehole located in the area of each planned abutment. The remaining 3 boreholes were located at the proposed temporary detour bridge location. Borehole 7 was not completed due to access restrictions on private property. The field work was undertaken between March 28 and April 6, 2022. The boreholes were advanced using continuous flight hollow stem augers, powered by a track mounted Diedrich D50-T drill rig, equipped with an automatic hammer. Representative samples of the subgrade were recovered at frequent depth intervals for sampling. Standard penetration tests were also carried out simultaneously during the sampling. Ground water conditions within the boreholes were also assessed.

The subsurface soil stratigraphy encountered in Boreholes 1 to 4, at the Durham Street Bridge site, comprised surficial pavement over fill, underlain by sand and gravel deposits layered between various till deposits. Bedrock was encountered in Boreholes 1 & 2 at depths of 19.4m and 18.7m respectively. Groundwater was encountered in Boreholes 1-3 at depths of approximately 4m and at 2.7m in borehole 4. At the temporary bridge location, boreholes 5, 6 & 8 encountered surficial pavement and/or fill, underlain by sand and gravel, clayey silt, clayey silt till and sandy silt till. Groundwater was encountered at depths of 4.3m and 2.9m for boreholes 5 & 6 respectively. Borehole 8 was advanced to depths of only 2.1m and did not encounter water.

(b) Recommendations

The proposed footings/pile caps for the replacement bridge are to be located at the elevation of 240.0 for the river pier locations and at elevation 243.5 for the abutments. It is assumed that the foundations for the temporary bridge would be located at similar elevations. In general, the native sand and gravel and stiff clayey silt deposits found at the Durham Street Bridge and temporary detour bridge site would be suitable support for relatively low-capacity strip footings and cribbing.

For deep foundations comprised of H-Piles, used for the abutments and mid-river piers, it is recommended that the piles be driven to refusal on bedrock. A copy of the Geotechnical Assessment is included within Appendix H.

6.0 IDENTIFICATION OF POTENTIAL IMPACTS

6.1 General

In reviewing the various criteria identified in Section 3.4 of this report and additional comments provided during the public consultation program, a number of specific environmental elements were identified which could be adversely affected by implementation of the preferred alternatives. The impact of specific components of the proposed bridge construction, on the identified environmental elements, are summarized in Table 6.1. The table identifies impacts directly related to construction which are generally short-term in nature and of limited duration. Impacts of a greater magnitude and duration (changes to traffic patterns, private property impacts) are also discussed in the following section.

Table 6.1
Construction Related Environmental Effects

Key Project Works and Activities	Geology and Hydrology Resources	Aquatic Resources	Significant Environmental Features	Cultural Heritage Resources	Social Environment	Economic Environment	Technical Environment
Construction Component							
Contractor Mobilization to the site	○	○	○	○	●	○	○
Establish Temporary Storage Areas	○	●	○	○	●	○	○
Installation of Sediment Control Devices	○	●	○	○	○	○	○
Traffic Control Plan Implementation	○	○	○	○	●	○	○
Maintenance of Pedestrian Access	○	○	○	○	●	○	○
Installation of temporary access platform under bridge	○	●	○	●	○	○	●
Removal of deteriorated concrete	○	●	○	●	○	○	●
Replacement of railings	○	●	○	●	○	○	●
Reinforcement of the half-joints	○	○	○	○	○	○	●
Installation of rock rip rap	●	●	○	●	●	○	●
Reconstruction of bridge deck	○	○	○	●	●	○	●

● Potential for adverse effect ○ No adverse effect expected

6.2 Impact Assessment and Mitigation

6.2.1 Potential Adverse Impacts

Based on the findings of the environmental effects analysis (Table 3.3) and the environmental interactions analysis (Table 6.1), it was determined that the preferred alternative has the potential to adversely impact upon a number of specific environmental features, including:

- Social Environment
- Economic Environment
- Cultural Environment
- Technical Environment

The potential impacts to each identified feature are described in this section of the report and measures to mitigate the impacts are also presented. As noted above, potential impacts have been categorized as either short term or long term and reviewed accordingly. The selection of mitigation measures was based upon a consideration of three broad approaches to mitigation: avoidance, minimization of adverse effects and compensation.

6.2.2 Social Environment

(a) Potential Impact to Residents/Adjacent Properties

To facilitate rehabilitation of the crossing, Durham Street at the bridge site, will be reduced to one lane of traffic while repairs are completed on half of the bridge. Following completion of the initial rehabilitation work, the lane closure will be switched so that the other half of the bridge can be repaired. Temporary signals will be installed on Durham Street east and west of the bridge to allow traffic to be routed through the single lane. Pedestrian access will be maintained on the same side of the bridge where traffic is being diverted. A dedicated pedestrian crossing will be established at the McNabb Street intersection to allow pedestrians to cross the road and access the Saugeen River trail. The north bound slip lane at the McNabb Street intersection will be closed during the duration of construction.

Properties located in proximity to the bridge site could experience some direct impacts from construction (e.g. noise, traffic disruption, and restricted access). The closest residential uses are located north and east of the bridge; a condominium development off of William Street North and single family homes off of William, Elm and George Streets. Access to adjacent properties will be maintained during the entire construction period. Signage will be erected asking queuing cars not to block intersections.

Until emergency repairs are completed at the bridge and the load limit restrictions are removed, truck traffic will be directed to the detour using the County Road system south or north of Walkerton. Once the repairs are completed, no long-term impacts to traffic are anticipated. Figures 6.1 and 6.2 illustrates the proposed traffic control plan implemented at the bridge site for pedestrian and vehicular traffic.

(b) Pedestrian Access

As noted above, both vehicular and pedestrian traffic will be maintained over the bridge during completion of the repairs. Pedestrian traffic will use the existing sidewalk on the open half of the bridge, crossing Durham Street at the designated pedestrian crossing locations. Access to the Saugeen River Trail will be maintained although the parking area located adjacent to the southeast end of the bridge will be closed during the work. Access to the trail will be maintained along the south limit of the parking area.

(c) Commercial District

Even with implementation of the staged construction that will maintain one lane of traffic over the bridge, there may be impacts to downtown businesses if tourists opt to take a different route to avoid the construction. To mitigate this impact, signage will be erected at the entrances to the community and at major intersections in the County road network, advising that the downtown shopping district is open for business. Social media and local radio stations will also be utilized to encourage tourists to visit Walkerton on their way to the cottage to stock up on provisions.

(d) Potential Impact to Navigation & Recreation

The Saugeen River, at the bridge site, serves an important recreational and environmental role within the community. The river is a popular destinations for tourism and local fishing enthusiasts; the Saugeen River Trail extends along the top of river bank adjacent to the bridge site. Access to the trail head, located at the southeast corner of the bridge, will be maintained during construction. Temporary closure of the river will be required during portions of the construction due to safety concerns, however a navigational opening will be maintained during a majority of the construction period. The following measures will be implemented to ensure the safe passage of vessels through the bridge site during construction:

- A minimum opening measuring 3m x 3m will be maintained beneath the bridge during construction, to permit passage of vessels beneath the site.
- Warning signs will be placed up and downstream of the bridge site advising vessels of the bridge construction.
- If temporary closures are required, advanced notice will be provided to the public so that alternative arrangements can be made.

(e) Emergency Response Times

As noted above, during completion of the repairs/rehabilitation access over the bridge will be limited to one lane of traffic controlled by signals established north and south of the crossing. The Municipality of Brockton, as well as several residents, have expressed concerns about the ability of Emergency Responders to cross the bridge quickly during an emergency. The County of Bruce is proposing that emergency response vehicles be equipped with a transponder that will override the signals temporarily allowing emergency vehicles to quickly cross the bridge during emergencies. This approach has been used successfully during other bridge rehabilitation projects and should address this concern.

6.2.3 Economic Environment

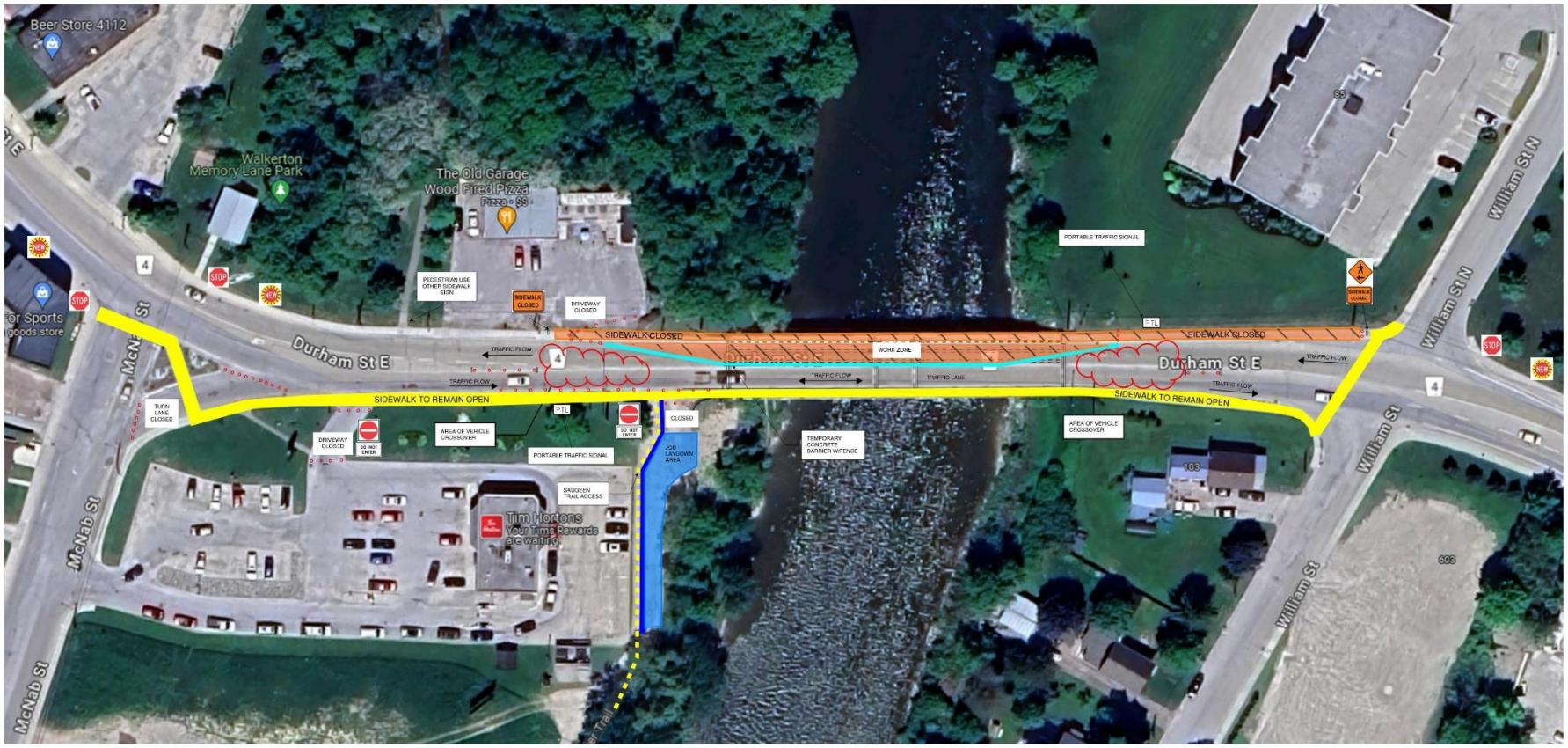
The probable cost of the project is approximately **$5,900,000** (plus engineering and an allowance for approvals). This includes the immediate repairs that are being implemented in May 2024 to address the half-joints as well as the additional rehabilitation needed to address deterioration present in the rest of the structure. The proponent intends to finance the capital costs of the work through their capital works budget.

6.2.4 Cultural Environment

(a) Built Heritage

Implementation of the preferred alternative has the potential to impact cultural heritage features identified during completion of the HIA for the crossing. The County is proposing to restore existing and historic design elements during completion of the rehabilitation work to ensure that cultural features are maintained. A copy of the Cultural Heritage Evaluation Report and Heritage Impact Assessment will be provided to the Bruce County Archives.

Figure 6.1 – Stage 1 Traffic Control Plan



LEGEND:

- TC-54 Traffic Barrels
- Fast Fence
- Saugeen Trail Access
- Pedestrian Access Pathway

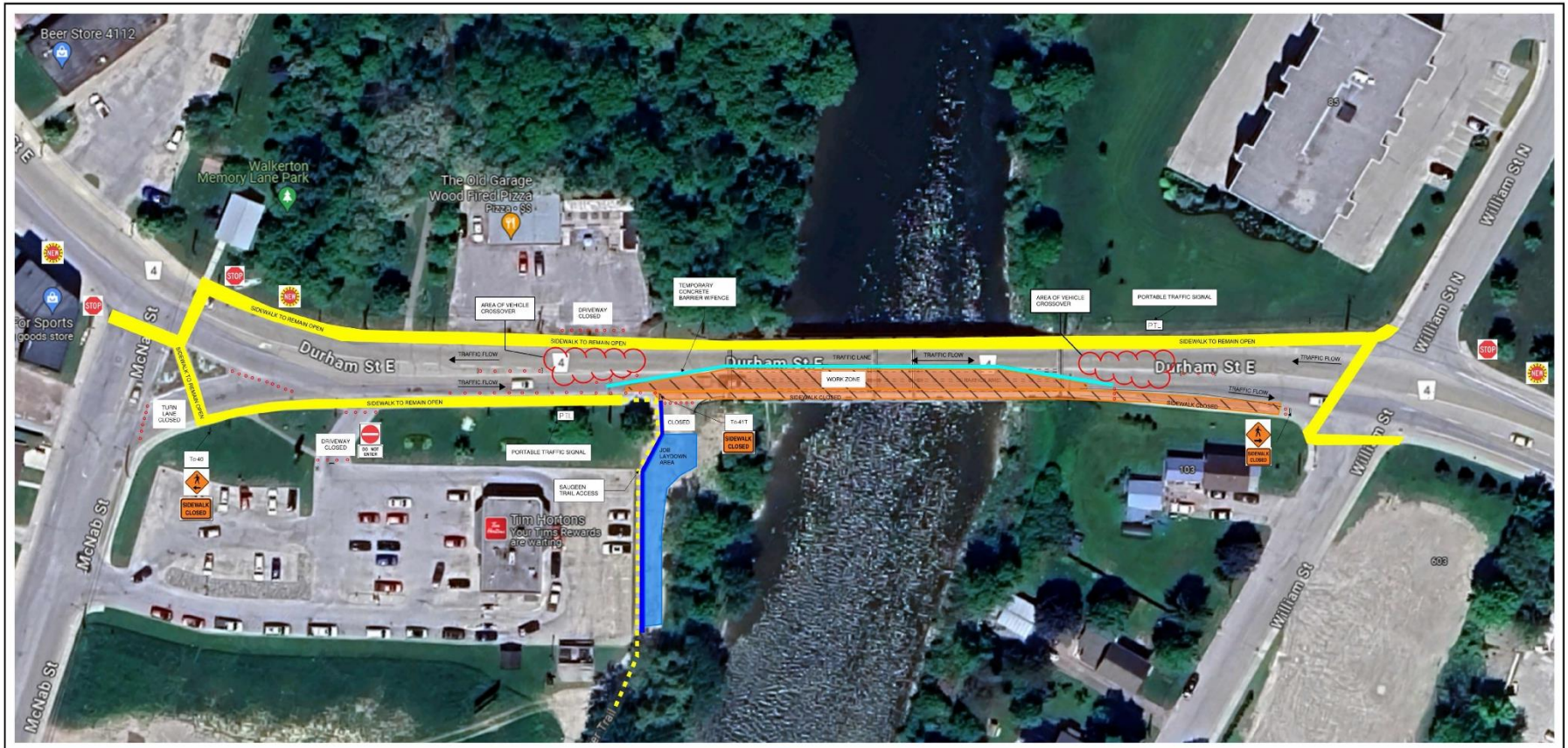
Source
Information and Graphics Provided by Pullman

BMROSS engineering better communities

COUNTY OF BRUCE
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT FOR THE DURHAM ST BRIDGE
STAGE 1 - PEDESTRIAN TRAFFIC MANAGEMENT PLAN

DATE	PROJECT No.
JUNE 06, 2024	BR1395
SCALE	FIGURE No.
None	6.1

Figure 6.2 – Stage 2 Traffic Control Plan



LEGEND:

- TC-54 Traffic Barrels
- Fast Fence
- Saugeen Trail Access
- Pedestrian Access Pathway

Source
Information and Graphics Provided by Pullman

BMROSS engineering better communities

COUNTY OF BRUCE
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT
FOR THE DURHAM ST BRIDGE
STAGE 2 - PEDESTRIAN TRAFFIC MANAGEMENT PLAN

DATE	PROJECT No.
JUNE 06, 2024	BR1395
SCALE	FIGURE No.
None	6.2

6.2.5 Technical Environment

(a) Traffic Movement (Short Term)

Completion of the required repairs/rehabilitation will be completed using staged construction while maintaining one lane of traffic for vehicles. Temporary signals will be established north and south of the bridge to maintain traffic movement. Access to private properties will be maintained throughout the construction period, although there may be brief periods when access is limited. Property owners will be given advance notice of the timing so that alternative arrangements can be made, if required.

(b) Half-joints

As discussed in section 2.8 of this report, the current half-joint arrangement at the centre span of the bridge is no longer an accepted design due to its single load path nature and potential to fail suddenly, without warning. Emergency repairs being completed currently at the bridge are designed to rehabilitate the half-joints and reinforce them for redundancy. It is essential that the emergency repairs address this deficiency to ensure the ongoing safety of the road network for the traveling public.

7.0 STAGE 4: STUDY RECOMMENDATIONS AND PROJECT IMPLEMENTATION

7.1 General

The purpose of the fourth stage of the study was to develop study conclusions and recommendations for future action. The stage involved the completion of a final evaluation of study findings and the identification of a preferred alternative. This stage also involved identifying (1) future work required to implement the selected alternative and (2) measures to mitigate the impacts of constructing the proposed works.

7.2 Study Conclusions

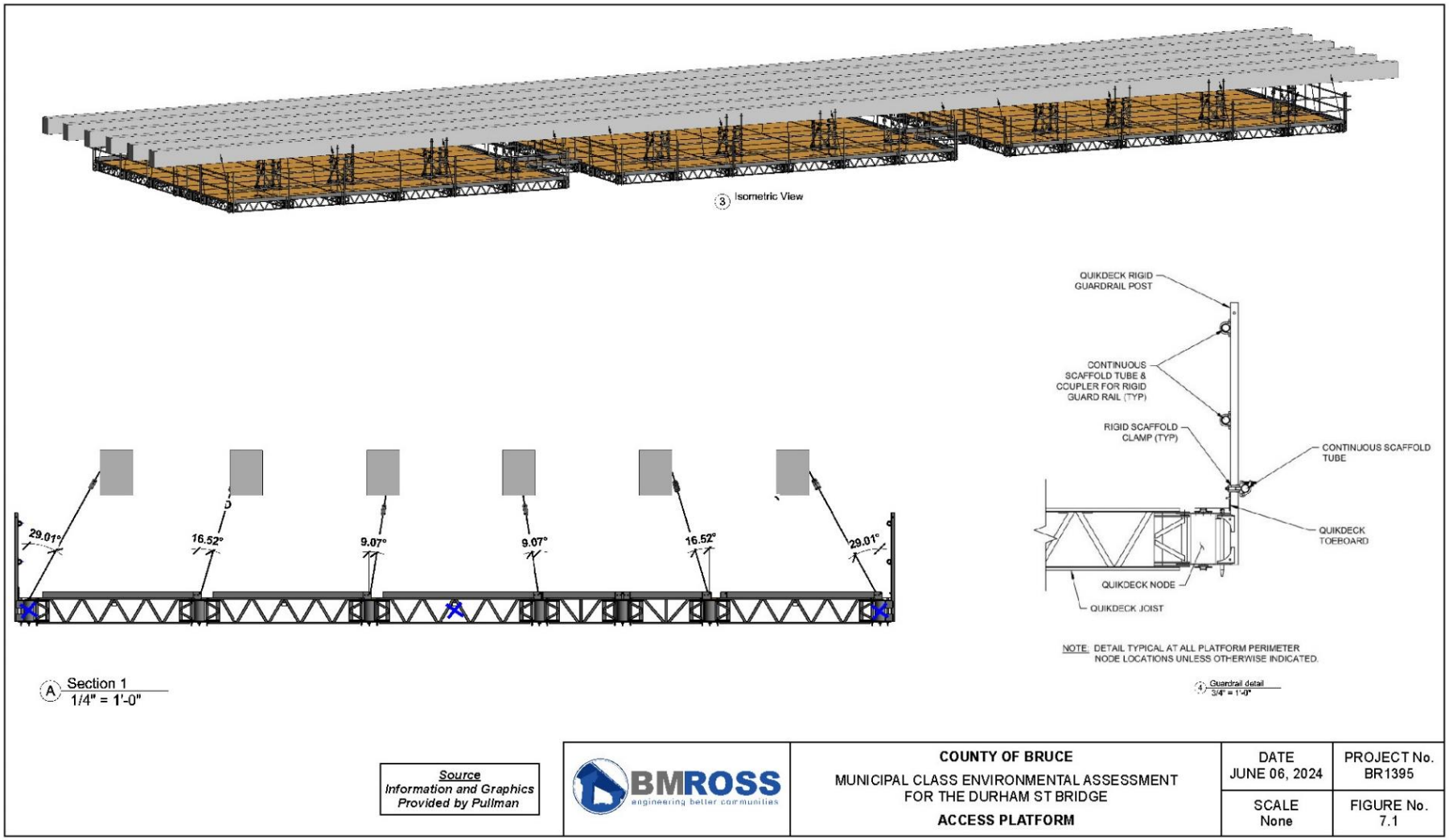
Based upon a review of the current environmental setting, no potential impacts were identified with Alternative 2 that could not be mitigated. To this end, the proposed bridge repair/rehabilitation plan appears to be appropriate from a technical perspective and should not adversely affect the environmental setting, once the work is complete. It was therefore concluded from the study that the proponents should proceed with the project, pending the receipt of all required approvals and in accordance with all mitigation measures defined during the approvals process.

7.3 Selection of a Preferred Alternative

(a) Preferred Alternative

Given the foregoing, Alternative 2 – Repair/Rehabilitation of the Durham Street Bridge was selected as the preferred solution to the identified problem. The works associated with the preferred alternative are illustrated on Figure 7.1 and discussed in more detail below.

Insert Figure 7.1



(b) Proposed Works

The proposed repair/rehabilitation works will include the restoration of deteriorated concrete and reinforcing steel components on the bridge's deck, railings, abutments and piers. The half-joints will also be rehabilitated and reinforced to provide additional redundancy and reduce the likelihood of sudden failure. To address potential impacts to cultural heritage elements, the rehabilitation will include sympathetic modification or repair of any rehabilitated components and especially of heritage attributes, including:

- Stylized pile caps/piers;
- Embossed stanchions/pillars;
- Arched T-Beams;
- Railing posts; and
- Cantilevered end spans.

7.4 Class EA Project Schedule

The recommended solution is considered a Schedule B project under the terms of the Class EA document, as the project involves the reconstruction or alteration of a structure that is over 40 years old that was determined to have cultural heritage value, and the heritage attributes will be conserved in accordance with the recommendations of a Heritage Impact Assessment. This project is approved following the completion of an environmental screening process**.**

7.5 Final Public Consultation

A Notice of Completion was recently circulated to local residents, stakeholders and government review agencies (refer to Appendix F). The notice identified the preferred alternative and provided the basis for appeal of the selected option (i.e., a Section 16 request to the Minister of Environment Conservation and Parks prior to the conclusion of the review period). The following summarizes the distribution of the notice.

Contents:	Identification of preferred solution, key plan, summary of appeal mechanism
Issued:	August 14, 2024
Placed In:	The Sun Times (August 14 & 21, 2024)
Distributed To:	16 review agencies, neighbouring property owners
Review Period:	Concludes September 13, 2024

7.6 Project Implementation

(a) Construction Period

The works associated with Alternative 2 outlined in section 3.4 of this report will be constructed during the 2024/25 construction season, pending the successful completion of the Class EA process and the receipt of approvals. The emergency reinforcement component of the project was initiated in May 2024 and will be completed in December

of 2024. The rehabilitation work required to address deterioration present in the rest of the structure would be initiated in early 2025 and be completed by year's end. The project will be completed by a qualified contractor familiar with concrete rehabilitation and repair. Following the completion of the rehabilitation work, the proponent will maintain the physical condition and operation of the structure and will perform remediation work as required and in accordance with the requirements of applicable regulatory agencies.

(b) General Construction Sequence

The construction plan for the bridge replacement project involves the following tasks:

- Erection of lane restriction signs at intersections immediately north and south of the proposed bridge site;
- Provision of signals and barricades at the bridge to define the work area;
- Establishment of lay down area for contractor;
- Mobilization of construction equipment to the site;
- Completion of site layout, including service locates;
- Installation of temporary access platform
- Removal of bridge deck on half of the bridge;
- Concrete removals and railing replacement;
- Implement second stage of construction after initial work completed;
- Provision of riprap protection along channel at upstream and downstream ends;
- Completion of all required documentation and reporting on the works;
- Completion of any required remediation.

7.7 Impact Mitigation

A series of remediation measures will need to be implemented in order to minimize the environmental impacts associated with the proposed works. The following represent the key measures of the proposed mitigation plan:

- During construction, a navigational opening will be maintained within the channel to ensure that recreational boat traffic is maintained.
- In-water work will be minimized as much as possible and restricted to periods of low flow, during timing windows established by applicable review agencies. This will minimize the impact of construction activity on fish populations and other aquatic species inhabiting the work zone.
- The Ontario Occupational Health and Safety Act will apply to all project related activity in order to minimize the risks posed by construction.
- Upon completion of the emergency reinforcement work on the bridge and removal of the load posting, the truck detour will be removed. Single lane access over the bridge will be maintained for the duration of the project, controlled by temporary signals established north and south of the bridge. Traffic movement in

the vicinity of the project site will be coordinated by the Contractor in accordance with Book 7 (Temporary Conditions) of the Ontario Traffic Manual.

- Construction activities will be conducted in accordance with contract documentation and the impact mitigation requirements of various regulatory agencies. The work will be monitored through on-site supervision.
- Erosion and sediment control measures will be implemented throughout the entire work zone to minimize temporary sediment loadings to the watercourse.
- Pedestrian access will be maintained over the bridge for the duration of the project, including a dedicated pedestrian crossing on Durham Street at McNabb.
- Rehabilitation work completed on the bridge will be consistent with recommendations in the Heritage Impact Assessment included in Appendix D.

7.8 Cost Recovery

The probable cost of the project is approximately **$5,900,000** (plus engineering). This includes the immediate repairs that are being implemented in May 2024 to address the half-joints as well as the additional rehabilitation needed to address deterioration present in the rest of the structure. The proponent intends to finance the capital costs of the work through their capital works budge.

7.9 Class EA Study Completion

The following activities are required in order to complete the formal Class EA process:

- Address outstanding issues resulting from the Notice of Completion;
- Finalize the Environmental Study Report (ESR) following the conclusion of the 30-day review period;
- Advise the Municipality of Brockton and the MECP when the study process is complete (assuming no Section 16 requests are filed).

8.0 APPROVALS

8.1 General

A number of approvals will be required in order to facilitate implementation of the recommended solution. The following are the key approvals required to permit the construction of the proposed works:

8.2 Conservation Authorities Act

The proposed bridge reconstruction works will involve construction on lands regulated by the Saugeen Valley Conservation Authority (SVCA). In accordance with the Conservation Authorities Act, an application will be submitted to the Conservation Authority to obtain approval for the project. The application will set out measures

proposed to protect sensitive lands, such as stream banks, during construction in order to minimize the negative impacts of the project on the ecology of the area.

8.3 Federal Fisheries Act

The works associated with the preferred alternative will be subject to the Federal Fisheries Act. The Department of Fisheries and Oceans (DFO) will review the proposal and determine if the project may cause fish habitat alteration, disruption or destruction (HADD). Once the project is reviewed, DFO will issue either a Letter of Advice (LOA) or require a formal authorization as compensation for the potential impacts.

9.0 IMPLEMENTATION SCHEDULE

A general schedule for the proposed bridge rehabilitation has been prepared subject to receipt of required approvals. The following represents the schedule for the completion of key project components:

- Completion of final design drawings (September 2024)
- Tender of the proposed works (October 2024)
- Initiation of works (January 2025).
- Completion of works (December 2025).

10.0 SUMMARY

This report documents the Municipal Class Environmental Assessment process conducted to define a solution to resolve the identified deficiencies with key components of the Durham Street Bridge, which spans the Lower Saugeen River along Bruce Road 4 (Durham Street) in the Community of Walkerton. The preferred solution, to repair/ rehabilitate the existing bridge to address safety concerns associated with the half-joints and other concrete deterioration present in the structure, represents the most practical approach to resolving the defined problems with the existing bridge structure.

The Class EA process included significant consultation with local residents, including three public meetings for residents and local business owners and the establishment of a dedicated project website. Consultation was also undertaken with provincial and federal review agencies and local indigenous communities.

The proposed project was initiated as a Schedule C Class EA activity, based upon an initial review of the MEA schedules when the project was initiated in February of 2021. The preferred solution, however, was determined to be a Schedule B activity under the terms of the 2023/2024 amended Class EA and is approved subject to the completion of a screening process. The County of Bruce intends to proceed with the implementation

of this project upon completion of the Class EA investigation and after receipt of all necessary approvals.

All of which is respectfully submitted.

B. M. ROSS AND ASSOCIATES LIMITED

Per _____
Ryan Munn, P. Eng.

Per _____
Kelly Vader MCIP, RPP
Environmental Planner

:hv

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